

Applicant's or agent's file reference number	PA005PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13 bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>311</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input checked="" type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 20 May 1997	Accession Number 209059
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States) Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC). Continued on the Attached Pages 2 & 3	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable) The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

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Authorized officer	Authorized officer

ATCC Deposit No. 209059**Page 2****CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

AUSTRALIA

The applicant hereby gives notice that the furnishing of a sample of a microorganism shall only be effected prior to the grant of a patent, or prior to the lapsing, refusal or withdrawal of the application, to a person who is a skilled addressee without an interest in the invention (Regulation 3.25(3) of the Australian Patents Regulations).

FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

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ATCC Deposit No. 209059

Page 3

DENMARK

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SWEDEN

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NETHERLANDS

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Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 20 May 1997	Accession Number 209060
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States) Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC). Continued on the Attached Pages 2 & 3	
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For receiving Office use only <input type="checkbox"/> This sheet was received with the international application Authorized officer	For International Bureau use only <input type="checkbox"/> This sheet was received by the International Bureau on: Authorized officer

ATCC Deposit No. 209060**Page 2****CANADA**

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AUSTRALIA

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FINLAND

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UNITED KINGDOM

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ATCC Deposit No. 209060**Page 3****DENMARK**

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SWEDEN

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NETHERLANDS

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Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 20 May 1997	Accession Number 209061
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States) Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC). Continued on the Attached Pages 2 & 3	
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ATCC Deposit No. 209061**Page 2****CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

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AUSTRALIA

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FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

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ATCC Deposit No. 209061

Page 3

DENMARK

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

SWEDEN

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NETHERLANDS

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Applicant's or agent's file reference number	PA005PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13 *bis*)

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B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input checked="" type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 20 May 1997	Accession Number 209062
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC). Continued on the Attached Pages 2 & 3	
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ATCC Deposit No. 209062**Page 2****CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

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AUSTRALIA

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FINLAND

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UNITED KINGDOM

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ATCC Deposit No. 209062**Page 3****DENMARK**

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NETHERLANDS

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Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 20 May 1997	Accession Number 209063
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Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC). Continued on the Attached Pages 2 & 3	
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ATCC Deposit No. 209063**Page 2****CANADA**

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ATCC Deposit No. 209063**Page 3****DENMARK**

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Date of deposit 20 May 1997	Accession Number 209064
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D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC). Continued on the Attached Pages 2 & 3	
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ATCC Deposit No. 209064**Page 2****CANADA**

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AUSTRALIA

The applicant hereby gives notice that the furnishing of a sample of a microorganism shall only be effected prior to the grant of a patent, or prior to the lapsing, refusal or withdrawal of the application, to a person who is a skilled addressee without an interest in the invention (Regulation 3.25(3) of the Australian Patents Regulations).

FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

ATCC Deposit No. 209064**Page 3****DENMARK**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

SWEDEN

The applicant hereby requests that, until the application has been laid open to public inspection (by the Swedish Patent Office), or has been finally decided upon by the Swedish Patent Office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the International Bureau before the expiration of 16 months from the priority date (preferably on the Form PCT/RO/134 reproduced in annex Z of Volume I of the PCT Applicant's Guide). If such a request has been filed by the applicant any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Swedish Patent Office or any person approved by a applicant in the individual case.

NETHERLANDS

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

Applicant's or agent's file reference number	PA005PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13 bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>311</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input checked="" type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 20 May 1997	Accession Number 209065
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC). Continued on the Attached Pages 2 & 3	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

For receiving Office use only	For International Bureau use only
<input type="checkbox"/> This sheet was received with the international application	<input type="checkbox"/> This sheet was received by the International Bureau on:
Authorized officer	Authorized officer

ATCC Deposit No. 209065**Page 2****CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

AUSTRALIA

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FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

ATCC Deposit No. 209065**Page 3****DENMARK**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

SWEDEN

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NETHERLANDS

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

Applicant's or agent's file reference number	PA005PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13 bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>311</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input checked="" type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 20 May 1997	Accession Number 209066
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States) Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC). Continued on the Attached Pages 2 & 3	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable) The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

For receiving Office use only <input type="checkbox"/> This sheet was received with the international application Authorized officer	For International Bureau use only <input type="checkbox"/> This sheet was received by the International Bureau on: Authorized officer
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ATCC Deposit No. 209066**Page 2****CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

AUSTRALIA

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FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

ATCC Deposit No. 209066**Page 3****DENMARK**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

SWEDEN

The applicant hereby requests that, until the application has been laid open to public inspection (by the Swedish Patent Office), or has been finally decided upon by the Swedish Patent Office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the International Bureau before the expiration of 16 months from the priority date (preferably on the Form PCT/RO/134 reproduced in annex Z of Volume I of the PCT Applicant's Guide). If such a request has been filed by the applicant any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Swedish Patent Office or any person approved by a applicant in the individual case.

NETHERLANDS

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

2182

Applicant's or agent's file reference number	PA005PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13 bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>311</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input checked="" type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 20 May 1997	Accession Number 209067
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC). Continued on the Attached Pages 2 & 3	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

For receiving Office use only	For International Bureau use only
<input type="checkbox"/> This sheet was received with the international application	<input type="checkbox"/> This sheet was received by the International Bureau on:
Authorized officer	Authorized officer

ATCC Deposit No. 209067

Page 3

DENMARK

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

SWEDEN

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NETHERLANDS

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

Applicant's or agent's file reference number	PA005PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13 bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>311</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input checked="" type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 20 May 1997	Accession Number 209068
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC). Continued on the Attached Pages 2 & 3	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

For receiving Office use only	For International Bureau use only
<input type="checkbox"/> This sheet was received with the international application	<input type="checkbox"/> This sheet was received by the International Bureau on:
Authorized officer	Authorized officer

ATCC Deposit No. 209068**Page 2****CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

AUSTRALIA

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FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

ATCC Deposit No. 209068**Page 3****DENMARK**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

SWEDEN

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NETHERLANDS

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

Applicant's or agent's file reference number	PA005PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13 bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>311</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input checked="" type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 20 May 1997	Accession Number 209069
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC). Continued on the Attached Pages 2 & 3	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

For receiving Office use only	For International Bureau use only
<input type="checkbox"/> This sheet was received with the international application	<input type="checkbox"/> This sheet was received by the International Bureau on:
Authorized officer	Authorized officer

ATCC Deposit No. 209069**Page 2****CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

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AUSTRALIA

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FINLAND

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UNITED KINGDOM

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ATCC Deposit No. 209069**Page 3****DENMARK**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

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NETHERLANDS

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Applicant's or agent's file reference number	PA005PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13 bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>311</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input checked="" type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 12 January 1998	Accession Number 209579
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC). Continued on the Attached Pages 2 & 3	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

For receiving Office use only <input type="checkbox"/> This sheet was received with the international application Authorized officer	For International Bureau use only <input type="checkbox"/> This sheet was received by the International Bureau on: Authorized officer
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ATCC Deposit No. 209579**Page 2****CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

AUSTRALIA

The applicant hereby gives notice that the furnishing of a sample of a microorganism shall only be effected prior to the grant of a patent, or prior to the lapsing, refusal or withdrawal of the application, to a person who is a skilled addressee without an interest in the invention (Regulation 3.25(3) of the Australian Patents Regulations).

FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

ATCC Deposit No. 209579

Page 3

DENMARK

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

SWEDEN

The applicant hereby requests that, until the application has been laid open to public inspection (by the Swedish Patent Office), or has been finally decided upon by the Swedish Patent Office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the International Bureau before the expiration of 16 months from the priority date (preferably on the Form PCT/RO/134 reproduced in annex Z of Volume I of the PCT Applicant's Guide). If such a request has been filed by the applicant any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Swedish Patent Office or any person approved by a applicant in the individual case.

NETHERLANDS

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

Applicant's or agent's file reference number	PA005PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13 bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>311</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input checked="" type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 12 January 1998	Accession Number 209578
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC). Continued on the Attached Pages 2 & 3	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

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<input type="checkbox"/> This sheet was received with the international application	<input type="checkbox"/> This sheet was received by the International Bureau on:
Authorized officer	Authorized officer

ATCC Deposit No. 209578**Page 2****CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

AUSTRALIA

The applicant hereby gives notice that the furnishing of a sample of a microorganism shall only be effected prior to the grant of a patent, or prior to the lapsing, refusal or withdrawal of the application, to a person who is a skilled addressee without an interest in the invention (Regulation 3.25(3) of the Australian Patents Regulations).

FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

ATCC Deposit No. 209578**Page 3****DENMARK**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

SWEDEN

The applicant hereby requests that, until the application has been laid open to public inspection (by the Swedish Patent Office), or has been finally decided upon by the Swedish Patent Office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the International Bureau before the expiration of 16 months from the priority date (preferably on the Form PCT/RO/134 reproduced in annex Z of Volume I of the PCT Applicant's Guide). If such a request has been filed by the applicant any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Swedish Patent Office or any person approved by a applicant in the individual case.

NETHERLANDS

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

Applicant's or agent's file reference number	PA005PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13 bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>311</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input checked="" type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 16 July 1998	Accession Number 203067
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States) Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC). Continued on the Attached Pages 2 & 3	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable) The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

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ATCC Deposit No. 203067**Page 2****CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

AUSTRALIA

The applicant hereby gives notice that the furnishing of a sample of a microorganism shall only be effected prior to the grant of a patent, or prior to the lapsing, refusal or withdrawal of the application, to a person who is a skilled addressee without an interest in the invention (Regulation 3.25(3) of the Australian Patents Regulations).

FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

ATCC Deposit No. 203067**Page 3****DENMARK**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

SWEDEN

The applicant hereby requests that, until the application has been laid open to public inspection (by the Swedish Patent Office), or has been finally decided upon by the Swedish Patent Office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the International Bureau before the expiration of 16 months from the priority date (preferably on the Form PCT/RO/134 reproduced in annex Z of Volume I of the PCT Applicant's Guide). If such a request has been filed by the applicant any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Swedish Patent Office or any person approved by a applicant in the individual case.

NETHERLANDS

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

Applicant's or agent's file reference number	PA005PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13 bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>311</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input checked="" type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 16 July 1998	Accession Number 203068
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States) Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC). Continued on the Attached Pages 2 & 3	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable) The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

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ATCC Deposit No. 203068**Page 2****CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

AUSTRALIA

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FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

ATCC Deposit No. 203068**Page 3****DENMARK**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

SWEDEN

The applicant hereby requests that, until the application has been laid open to public inspection (by the Swedish Patent Office), or has been finally decided upon by the Swedish Patent Office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the International Bureau before the expiration of 16 months from the priority date (preferably on the Form PCT/RO/134 reproduced in annex Z of Volume I of the PCT Applicant's Guide). If such a request has been filed by the applicant any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Swedish Patent Office or any person approved by a applicant in the individual case.

NETHERLANDS

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

Applicant's or agent's file reference number	PA005PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13 bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>311</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input checked="" type="checkbox"/>	
Name of depositary institution <u>American Type Culture Collection</u>	
Address of depositary institution (including postal code and country) <u>10801 University Boulevard</u> <u>Manassas, Virginia 20110-2209</u> <u>United States of America</u>	
Date of deposit <u>01 February 1999</u>	Accession Number <u>203609</u>
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
<u>Europe</u> In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC). Continued on the Attached Pages 2 & 3	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit") 	

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Authorized officer	Authorized officer

ATCC Deposit No. 203609**Page 2****CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

AUSTRALIA

The applicant hereby gives notice that the furnishing of a sample of a microorganism shall only be effected prior to the grant of a patent, or prior to the lapsing, refusal or withdrawal of the application, to a person who is a skilled addressee without an interest in the invention (Regulation 3.25(3) of the Australian Patents Regulations).

FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

ATCC Deposit No. 203609

Page 3

DENMARK

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

SWEDEN

The applicant hereby requests that, until the application has been laid open to public inspection (by the Swedish Patent Office), or has been finally decided upon by the Swedish Patent Office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the International Bureau before the expiration of 16 months from the priority date (preferably on the Form PCT/RO/134 reproduced in annex Z of Volume I of the PCT Applicant's Guide). If such a request has been filed by the applicant any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Swedish Patent Office or any person approved by a applicant in the individual case.

NETHERLANDS

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

Applicant's or agent's file reference number	PA005PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13 bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>311</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input checked="" type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 01 February 1999	Accession Number 203610
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States) Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC). Continued on the Attached Pages 2 & 3	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable) The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

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ATCC Deposit No. 203610**Page 2****CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

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AUSTRALIA

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FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

ATCC Deposit No. 203610**Page 3****DENMARK**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

SWEDEN

The applicant hereby requests that, until the application has been laid open to public inspection (by the Swedish Patent Office), or has been finally decided upon by the Swedish Patent Office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the International Bureau before the expiration of 16 months from the priority date (preferably on the Form PCT/RO/134 reproduced in annex Z of Volume I of the PCT Applicant's Guide). If such a request has been filed by the applicant any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Swedish Patent Office or any person approved by a applicant in the individual case.

NETHERLANDS

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

Applicant's or agent's file reference number	PA005PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13 bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>311</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input checked="" type="checkbox"/>	
Name of depositary institution <u>American Type Culture Collection</u>	
Address of depositary institution (including postal code and country) <u>10801 University Boulevard</u> <u>Manassas, Virginia 20110-2209</u> <u>United States of America</u>	
Date of deposit <u>17 November 1998</u>	Accession Number <u>203485</u>
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC). Continued on the Attached Pages 2 & 3	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

For receiving Office use only <input type="checkbox"/> This sheet was received with the international application Authorized officer	For International Bureau use only <input type="checkbox"/> This sheet was received by the International Bureau on: Authorized officer
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ATCC Deposit No. 203485**Page 2****CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

AUSTRALIA

The applicant hereby gives notice that the furnishing of a sample of a microorganism shall only be effected prior to the grant of a patent, or prior to the lapsing, refusal or withdrawal of the application, to a person who is a skilled addressee without an interest in the invention (Regulation 3.25(3) of the Australian Patents Regulations).

FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

ATCC Deposit No. 203485**Page 3****DENMARK**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

SWEDEN

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NETHERLANDS

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Applicant's or agent's file reference number	PA005PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13 bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>311</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input checked="" type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 18 June 1999	Accession Number PTA-252
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States) Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC). Continued on the Attached Pages 2 & 3	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable) The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

For receiving Office use only <input type="checkbox"/> This sheet was received with the international application Authorized officer	For International Bureau use only <input type="checkbox"/> This sheet was received by the International Bureau on: Authorized officer
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ATCC Deposit No. PTA-252**Page 2****CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

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AUSTRALIA

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FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

ATCC Deposit No. PTA-252**Page 3****DENMARK**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

SWEDEN

The applicant hereby requests that, until the application has been laid open to public inspection (by the Swedish Patent Office), or has been finally decided upon by the Swedish Patent Office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the International Bureau before the expiration of 16 months from the priority date (preferably on the Form PCT/RO/134 reproduced in annex Z of Volume I of the PCT Applicant's Guide). If such a request has been filed by the applicant any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Swedish Patent Office or any person approved by a applicant in the individual case.

NETHERLANDS

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

Applicant's or agent's file reference number	PA005PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13 bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>311</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input checked="" type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 18 June 1999	Accession Number PTA-253
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States) Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC). Continued on the Attached Pages 2 & 3	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable) The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

For receiving Office use only <input type="checkbox"/> This sheet was received with the international application Authorized officer	For International Bureau use only <input type="checkbox"/> This sheet was received by the International Bureau on: Authorized officer
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ATCC Deposit No. PTA-253**Page 3****DENMARK**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

SWEDEN

The applicant hereby requests that, until the application has been laid open to public inspection (by the Swedish Patent Office), or has been finally decided upon by the Swedish Patent Office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the International Bureau before the expiration of 16 months from the priority date (preferably on the Form PCT/RO/134 reproduced in annex Z of Volume I of the PCT Applicant's Guide). If such a request has been filed by the applicant any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Swedish Patent Office or any person approved by a applicant in the individual case.

NETHERLANDS

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

Applicant's or agent's file reference number	PA005PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13 bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>311</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input checked="" type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 28 October 1999	Accession Number PTA-881
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States) Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC). Continued on the Attached Pages 2 & 3	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable) The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

For receiving Office use only	For International Bureau use only
<input type="checkbox"/> This sheet was received with the international application	<input type="checkbox"/> This sheet was received by the International Bureau on:
Authorized officer	Authorized officer

ATCC Deposit No. PTA-881**Page 2****CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

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AUSTRALIA

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FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

ATCC Deposit No. PTA-881**Page 3****DENMARK**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

SWEDEN

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NETHERLANDS

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

Applicant's or agent's file reference number	PA005PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13 bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>311</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 28 October 1999	Accession Number PTA-882
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC). Continued on the Attached Pages 2 & 3	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g. "Accession Number of Deposit")	

For receiving Office use only	For International Bureau use only
<input type="checkbox"/> This sheet was received with the international application	<input type="checkbox"/> This sheet was received by the International Bureau on:
Authorized officer	Authorized officer

ATCC Deposit No. PTA-882**Page 2****CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

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AUSTRALIA

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FINLAND

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UNITED KINGDOM

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ATCC Deposit No. PTA-882**Page 3****DENMARK**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

SWEDEN

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NETHERLANDS

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What Is Claimed Is:

1. An isolated nucleic acid molecule comprising a polynucleotide having a nucleotide sequence at least 95% identical to a sequence selected from the group consisting of:

(a) a polynucleotide fragment of SEQ ID NO:X which is hybridizable to SEQ ID NO:X;

(b) a polynucleotide encoding a polypeptide fragment of SEQ ID NO:Y which is hybridizable to SEQ ID NO:X;

(c) a polynucleotide encoding a polypeptide domain of SEQ ID NO:Y which is hybridizable to SEQ ID NO:X;

(d) a polynucleotide encoding a polypeptide epitope of SEQ ID NO:Y which is hybridizable to SEQ ID NO:X;

(e) a polynucleotide encoding a polypeptide of SEQ ID NO:Y which is hybridizable to SEQ ID NO:X, having biological activity;

(f) a polynucleotide which is a variant of SEQ ID NO:X;

(g) a polynucleotide which is an allelic variant of SEQ ID NO:X;

(h) a polynucleotide which encodes a species homologue of the SEQ ID NO:Y;

(i) a polynucleotide capable of hybridizing under stringent conditions to any one of the polynucleotides specified in (a)-(h), wherein said polynucleotide does not hybridize under stringent conditions to a nucleic acid molecule having a nucleotide sequence of only A residues or of only T residues.

2. The isolated nucleic acid molecule of claim 1, wherein the polynucleotide fragment comprises a nucleotide sequence encoding a protein.

3. The isolated nucleic acid molecule of claim 1, wherein the polynucleotide fragment comprises a nucleotide sequence encoding the sequence identified as SEQ ID NO:Y, which is hybridizable to SEQ ID NO:X.

4. The isolated nucleic acid molecule of claim 1, wherein the polynucleotide fragment comprises the entire nucleotide sequence of SEQ ID NO:X, which is hybridizable to SEQ ID NO:X.

5. The isolated nucleic acid molecule of claim 2, wherein the nucleotide sequence comprises sequential nucleotide deletions from either the C-terminus or the N-terminus.

6. The isolated nucleic acid molecule of claim 3, wherein the nucleotide sequence comprises sequential nucleotide deletions from either the C-terminus or the N-terminus.

7. A recombinant vector comprising the isolated nucleic acid molecule of claim 1.

8. A method of making a recombinant host cell comprising the isolated nucleic acid molecule of claim 1.

9. A recombinant host cell produced by the method of claim 8.

10. The recombinant host cell of claim 9 comprising vector sequences.

11. An isolated polypeptide comprising an amino acid sequence at least 95% identical to a sequence selected from the group consisting of:

- (a) a polypeptide fragment of SEQ ID NO:Y;
- (b) a polypeptide fragment of SEQ ID NO:Y, having biological activity;
- (c) a polypeptide domain of SEQ ID NO:Y;
- (d) a polypeptide epitope of SEQ ID NO:Y;
- (e) a full length protein of SEQ ID NO:Y;
- (f) a variant of SEQ ID NO:Y;
- (g) an allelic variant of SEQ ID NO:Y; or
- (h) a species homologue of the SEQ ID NO:Y.

12. The isolated polypeptide of claim 11, wherein the full length protein comprises sequential amino acid deletions from either the C-terminus or the N-terminus.

13. An isolated antibody that binds specifically to the isolated polypeptide of claim 11.

14. A recombinant host cell that expresses the isolated polypeptide of claim 11.

15. A method of making an isolated polypeptide comprising:
(a) culturing the recombinant host cell of claim 14 under conditions such that said polypeptide is expressed; and
(b) recovering said polypeptide.

16. The polypeptide produced by claim 15.

17. A method for preventing, treating, or ameliorating a medical condition, comprising administering to a mammalian subject a therapeutically effective amount of the polypeptide of claim 11 or the polynucleotide of claim 1.

18. A method of diagnosing a pathological condition or a susceptibility to a pathological condition in a subject comprising:
(a) determining the presence or absence of a mutation in the polynucleotide of claim 1; and
(b) diagnosing a pathological condition or a susceptibility to a pathological condition based on the presence or absence of said mutation.

19. A method of diagnosing a pathological condition or a susceptibility to a pathological condition in a subject comprising:

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(a) determining the presence or amount of expression of the polypeptide of claim 11 in a biological sample; and

(b) diagnosing a pathological condition or a susceptibility to a pathological condition based on the presence or amount of expression of the polypeptide.

20. A method for identifying a binding partner to the polypeptide of claim 11 comprising:

(a) contacting the polypeptide of claim 11 with a binding partner; and

(b) determining whether the binding partner effects an activity of the polypeptide.

21. The gene corresponding to the cDNA sequence of SEQ ID NO:Y.

22. A method of identifying an activity in a biological assay, wherein the method comprises:

(a) expressing SEQ ID NO:X in a cell;

(b) isolating the supernatant;

(c) detecting an activity in a biological assay; and

(d) identifying the protein in the supernatant having the activity.

23. The product produced by the method of claim 20.

SEQUENCE LISTING

<110> Birse et. al.

<120> Colon and Colon Cancer Associated Polynucleotides and Polypeptides

<130> PA005PCT

<140> Unassigned

<141> September 28, 2000

<150> 60/157,137

<151> September 29, 1999

<150> 60/163,280

<151> November 3, 1999

<160> 8564

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3

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ggaaaaaaag tnataanaat ctggatagtc taagactcca ctattttaaa ag 412

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gttggagtaa gaaaaatgca ttgataaata ttacaaaact gaatgcaaat gtcctttgtg 240
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aatgaccctt ttcctccata acttttgatt tctaaggaaa atattagcat acatttcaaa 360

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ggatatatct taattgtgta ctttgtggaa ttttaaattt aaaggaaagg caactggaaa 540
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ttagggatcc cttgcaggct agaacaaagt tctgaccctt agaccaaatac tttatgttaa 180
gaagttttcc agaattcaaa aaaaaaaaaan t 211

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agaatgtgga ctgtcatgtt gatatcattg tacagtgata agccattttw atctgtatac 420
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tctctgtacc agcgctttat gttaattacc aaaactctcc tgcacagag catgatatct 720
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tatcttgggt agcatggaca gtttgtcaca gaaataagtt ccctattcaa acttggaatt 180
agctgattca gagtaacata ttaataatat aaaaatggcc ataccctttt atggcgtaac 240
attattttcta ggtattgttt ctaaggaaat aattttaaat attgggaaaa aatattttta 300
caattttacag tctgtctgac atttggtaaa tagctaattg tgatatattc atattaggag 360
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<400> 17

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catgacagak	caaaatcatt	tgatatccct	ttctccattc	taggtttttc	tttttttcag	120
taactgattt	accttgatca	cttttcaact	tccatattct	tcatatagta	aaaggcaaag	180
tgttgaagat	actacggtgt	ggtagtagtt	gaaaattatt	gccgtcatta	tttacatact	240
taagacatat	tagcaagttg	atccaaaatg	ggaggccctta	tagatgtgct	tgggggaaaa	300
tgaaggggag	aaagtagcca	tacaggagtt	caaagaattc	catgcccttc	agattagccc	360
attaccagaa	acatcatgaa	agtattttta	aaactaatta	tttactacag	tgtatttcac	420
ttgtcttgtg	tgtctgaaca	cnagganngc	taaattagca	agttttttaa	ggagggtattt	480
t						481

<210> 18

<211> 912

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (875)

<223> n equals a,t,g, or c

$\langle 220 \rangle$

<221> misc feature

<222> (881)

<223> n equals a,t,g, or c

<400> 18

aattcggcac	aggatcagac	ttccttttcaa	ctgtcctccc	ctccaagcag	accacctgtc	60
cccttctatc	ccagctcaga	gcagctgacc	caactcagaa	tctcttttcc	acaggatgaa	120
gtgcctttttg	aatgttattt	taagccgaga	gttaattttt	ctacacaaca	tatttccaga	180
catcttttag	tcttttattg	tcttagatac	tataagaaga	tgaacatgac	aattttctag	240
aacctggtag	cgtgtgtgtg	tgtggcgggg	ggtgtcgagg	gaggggagtg	agtcacagga	300
gcctgtcccc	caacaggtgt	gactgctctg	acaacctgtg	gcatgctgca	gggtcaggct	360
cctgatagga	ggatttcatg	actatgtcat	tgtctccact	cattttttgac	ccagtttga	420
atgtatctgc	aattgtgtgg	ctcaacactt	taggaacaa	tagattattt	tatattatta	480
tttctgatgg	tgacaagttt	gtcttgagg	cacattttct	ccttgaaaag	tgacatcctg	540
tcaattctgc	tctcacacta	ctgccatata	tttgtgtttt	ttgttggttat	tgtttgggta	600
gagcagttac	aagaaaccct	aaaacccttg	gatataaaag	aaatctgttt	attgattttt	660
aaatctttcc	tttccaaaag	ctgggataca	catgggagct	gtttggggaa	tttcccttgc	720
tgctaccggg	ctgccaccaa	atgggaattg	accaggcggg	ctgttttacac	tgtttctttg	780
gccactgtgg	ccyatggctc	aggaatatgg	ctcactggct	aaggccttacc	aaactcgggg	840
acagggggtc	agggaaacag	gaggggtgtt	cccntcccc	nttggcaggc	cttcccaccc	900
acctggttaa	cc					912

12

<210> 19
<211> 507
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (489)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (492)
<223> n equals a,t,g, or c

<400> 19
ggatacatag gaagttgacc tcgggggtatc atggagagtg tccctcctag tggctggagg 60
tagggacagt tggttgtggg gctggagaga gggtgtgggg aggaagcgag gatgcgtgcc 120
tgccactagg atctgcatcc ccgagcccaa gccaggaggg atttccctta ggcaacacca 180
tcccaggagg atctgccaca atttgcgttt cacagctraa gacgccgagg cttagagagc 240
tcgacctcct caaggtcaca ccactgggta aatagaggga tgcagactca ggttttgcta 300
tgtgctcaca tttcaacttt atgcttaaca tgaatggaaa aatatgaaag taaatagtga 360
aaaggtgagt tatgagctta gattacctag attattccag tatcccatgg aagctgagga 420
cttattccgc tttccacacc gaacactaaa tgtggaccag tatcaagaac cctcctgtcc 480
ccacgcagnt anaaccaggt ggcttct 507

<210> 20
<211> 410
<212> DNA
<213> Homo sapiens

<400> 20
ggcagagcca aaagaggggtt cttggatctc acgcaacaaa gagttcgggg cgagtccata 60
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gcagagcagt ggctttggct gctcagctgc ttgtacttgt tacttcttga gtatatgcta 180
aacaagggat tgattactcc ttgttttagca gttttctggg aaaggagtgg gcaattccca 240
gaactgaggg ttcctcccct ttttaagacc atattagggg gacttcctga tgttgccatg 300
gcatttgtaa actgtcatgg cgctrtgggw gtgtctttta gcatgctaata gctttataat 360
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<210> 21
<211> 496
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (36)
<223> n equals a,t,g, or c

<220>

<221> misc feature
 <222> (356)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (443)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (454)
 <223> n equals a,t,g, or c

<400> 21
 ggcacgaggg cacs mkcaaa ccttgtcttc cctctnctgt tgcattcctt ccctaccctt 60
 ccctcccagg tgctcggtac ttaccwagt ttctatatat cagtgtttta tgttggaatt 120
 ttctcttggt ttatttttac tagttggtaa accctgttta tgctgaaaca aataaggaaa 180
 tggatatatt gaccatatgt gttattcata gaagacagta tgatcaaatg tgccaaaaac 240
 aagcaaaaaa aacttaattc ctgrgaagta tgccttattt ttattgatct gctttgtctt 300
 acaattaagg tccaagagct tggttaaact gtattatttg cctaagtata aaaganaact 360
 tgaactgcat tgcaatattg acgttcttta aaatgagaga cactgtcaag taatttaact 420
 cagagatcag ccaccagatt tagnaatgcct atgnatgtgt gtgtgttggg agtggttttt 480
 tcctttaaac caccca 496

<210> 22
 <211> 363
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (313)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (333)
 <223> n equals a,t,g, or c

<400> 22
 ggcacgagta taaatgatgg tgtggatgtc aggggtgaggg aggagacaaa accacgatga 60
 cccctagctt tgtggcctga actgtgggtg gctgagggga tcgttaattg aatggggcag 120
 actgaggctt gtraggaaga tcagagtctg gttcttgaca tgagatgccc ttcaaacatc 180
 tcttcaacta ggtgcaacta gggatacaga aacactgkat atttcaacag cagaaattga 240
 atgggggggat tgatagcsct ggcgagggaa gcagctggta aagaagacag atggcaccct 300
 gagacagccc agnggtggaa taggaccccc agngtgcagg gattaaagtt ccatggggtg 360
 gtg 363

<210> 23
 <211> 239

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (238)

<223> n equals a,t,g, or c

<400> 23

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ctcaggctgc tgcacgtggs catccgcac cggccttityt tgcacagttt gaccgtggag 60
agcgcgggacc tgcagggctg ctgctttgct gggcctggca gccccaccc gagaagatgg 120
agttccggac ggcattctatc cgctctttg ggcacttaac aaggctctgcc acggagactg 180
taaggacgtc ttcttgacc aagtgggtggg cgggctggcg cctgctgct gcacctgna 239
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<210> 24

<211> 461

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (426)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (428)

<223> n equals a,t,g, or c

<400> 24

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aacaattaag tctttaggaa tgtgtaacca gaactatggt agtattgctt ataaaacttt 60
agtttaggttc aatatataca tatatacatc tctatatagg tatatagatt tgcattttgt 120
cttgtaaaat tttatttgaa taaattcttc ctgtaggtaa tgggaaacaa aattaatagt 180
tcatatgtca ctcattagcat ttctatattt gaaagtagcc caatataaaa cttttgattc 240
taaaattaaa ccagcagcct attacaagca cattctttga ttgagtcatt gggtataaac 300
ttactaaatg cagrgaagc agccaattta gggaaacttc tgagttggtg gggacactgt 360
tggattaata atgtacggta tgaattaagt gatgccttaa cttggatttt acattttaag 420
gttaangngg gggcatatgg tcagccaact tagggggcat t 461
```

<210> 25

<211> 453

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (442)

<223> n equals a,t,g, or c

<400> 25

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accagaccaa ccctatgaat ggctttcata taaacaggtt gcagaattgt cggagtgcac 60
```

15

```

aggctcagca ctgatccaga agggcttcaa gactgcccc gatcagttca ttggcatctt 120
tgctcaaaat agacctgagt gggtgattat tgaacaagga tgctttgctt attcgatggg 180
gatcgttcca ctttatgata cccttgga aaagccatc acgtacatag tcaacaaagc 240
tgaactctct ctgggtttttg ttgacaagcc agagaaggcc aaactcttat tagagggtgt 300
agaaaataag ttaataaccag gccttaaaat catagttgtc atggatgcct acggmagtaa 360
ctgggtgaac gaggccagag gtgtggggtg gaagtcacca gcatgaaggc gatggaggac 420
ctgggaagag ccaacagacg gnagcccaag cct 453

```

<210> 26

<211> 1940

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (576)

<223> n equals a,t,g, or c

<400> 26

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ggcagaggtc ctcaagtgcag ggcaacagga ctttaggttc aagatgggtga ctgcagccat 60
gctgctacag tgctgcccag tgcttgcccg gggccccaca agcctcctag gcaagggtgg 120
taagactcac cagttcctgt ttggtattgg acgctgtccc atcctggcta cccaaggacc 180
aaactgttct caaatccacc ttaaggcaac aaaggctgga ggagattctc catcttgggc 240
gaagggccac tgctcccttca tgctgtcgga actccaggat gggaagagca agattgtgca 300
gaaggcagcc ccagaagtcc aggaagatgt gaaggctttc aagacagatc tgcctagctc 360
cctggtctca gtcagcctaa ggaagccatt ttccgggtccc caggagcagg agcagatctc 420
tggaaggtc acacacctga ttcagaacaa tatgcctgga aactatgtct tcagttatga 480
ccagtttttc agggacaaga tcatggagaa gaaacaggat cacacctacc gtgtgttcaa 540
gactgtgaac cgctgggctg atgcataatc ctttgnccca acatttctct gaggcattctg 600
tgacctcaaa ggatgtgtcc gtctggtgta gtaatgatta cctggggcat gagccgacac 660
cctcaggtct tgcaagccac acaggagacc ctgcagcgtc atggtgctgg agctggtggc 720
acccgcaaca tctcaggcac cagtaagttt catgtggagc ttgagcagga gctggctgag 780
ctgcaccaga aggactcagc cctgctcttc tcctcctgct ttgttgccaa tgactctact 840
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gcttccatga tccaaggtat ccgtaacagt ggagcagcca agtttgtctt caggcacaat 960
gacctgacc acctaaagaa acttctagag aagtctaacc ctaagatacc caaaattgtg 1020
gcctttgaga ctgtccactc catggatggg gccatctgtc ccctcgagga gttgtgtgat 1080
gtgtcccacc agtatggggc cctgaccttc gtggatgagg tccatgctgt aggactgtat 1140
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tctggaactc ttggcaaggc ctttggctgt gtgggcggct acattgccag caccctgac 1260
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ctgaggcgag cccaccagcg caatgtcaag cacatgcgcc actactcatg gacagggggc 1440
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acagcaagct ctgtgatctc ctgctctcca agcatggcat ctatgtgcag gccatcaact 1560
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ctcagatgat ggaagatttt gtggagaagc tgctgctggc ttggactgcg gtggggctgc 1680
ccctccagga tgtgtctgtg gctgcctgca attctgtcg ccgtcctgta cactttgagc 1740
tcatgagtga gtgggaacgt tcctacttcg ggaacatggg gcccagtat gtcaccacct 1800
atgcctgaga agccagctgc ctaggattca caccacact gcgcttact tgggtccagg 1860
cctactcctg tcttctgctt tgttgtgtgc ctctagctga attgagccta aaaataaagc 1920

```

acaaaccaca gcaaaaaaaaa

1940

<210> 27
 <211> 864
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (552)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (773)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (856)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (863)
 <223> n equals a,t,g, or c

<400> 27
 tctaaatcca ttacaaatct gcttagcttc taaatatttc atcaatgagg aaatcccagc 60
 cctacaactt cggaacagtg aaatattagt ccagggatcc agtgagagac acagaagtgc 120
 tagaagccag tgctcgtgaa ctaaggagaa aaagaacaga caagggaaca gcctggacat 180
 ggcatcagag atccacatga caggcccaat gtgcctcatt gagaacacta atgggcgact 240
 gatggcgaat ccagaagctc tgaagatcct ttctgccatt acacagccta tgggtggtggt 300
 ggcaattgtg ggcctctacc gcacaggcaa atcctacctg atgaacaagc tggctggaaa 360
 gaaaaagggc ttctctcttg gctccacggt gcagtctcac actaaaggag tctggatgtg 420
 gtgtgtgccc caccccaaga agccaggcca catcctagtt ctgctggaca ccgaggggtct 480
 gggagatgta gagaagggtg acaaccagaa tgactcctgg atcttcgccc tggccgtcct 540
 cctgarcagc ancttcttgt acaatagcat aggaaccatt aaccagcagg ccatggacca 600
 actgcactat caatctcggt cctgaacctc acctccaaaa agaaagcgac ttcagtagaa 660
 agtggggtca gaaggaagag tgtggtcctg gccagctag aaaaaagcg ggatgacttt 720
 tgtaaacaga atcaggaagc atcatcagat cgttgctcag ctttacttca ggncattttc 780
 agtcctctag aagaagaagt gaagggcggg gaattttatt tcgaaaacca agggggggtaa 840
 ccgtctctgt tattcnagaa agnt 864

<210> 28
 <211> 703
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature

<222> (549)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (612)

<223> n equals a,t,g, or c

<400> 28

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gggtcgaccc acgcgtccgc caggagtagg tcctatcagt gcccccccag agtagagagc 60
aataagagcc cagcccagtg cagtcccggc tgtgttttcc tacctggtga tcagaagtgt 120
ctggttttgc ttgctgccc tttgcctctt gagtgggcag ccctgggctt gggccctccc 180
ctccggccct cagtgttggc tctgcagaag ctctgggggt cccttcaagt gcacgagggg 240
ttaggctgct gtccctgagt cctccattct gtactggggg gctggctagg acctggggct 300
gtggcctctc agggggcagc ctctccatgg caggcatccc tgccttgggc tgccctcccc 360
cagacccctg accacccctt gggtcctgtc ccccaccaga gccccagctc ctgtctgtgg 420
gggagccatc acggtgttcg tgcagtccat agcgcttctc aatgtgtgtc acccggaacc 480
tgggagggga ggggaactcg gggtttagga ccacaactca gaggctgctt ggccctcccc 540
tctgaccang cttatcctga gtttgggtgc tacttccctc tggcctaagg taggggaggc 600
cttctcagat tntgggggca cattgtgtag cctgacttct gcaggagctc ccaattccag 660
gaaggaaaag agccaaggcc ccacttttgg ggatcagggt ggg                                     703
```

<210> 29

<211> 337

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (71)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (331)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (332)

<223> n equals a,t,g, or c

<400> 29

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agggtgacact atagaaggta cgcttcgagg taccggatcc ggaattcccg ggtcgaccca 60
cgcgtccgca nttacattta tgttttagt tctaagtaag accctgagag attttcaaaa 120
aggaattaat gattattttt gtcttcccca ggattggaac gagttactat gctgtttctg 180
ggattgcata atgttcgtca gacctccatg ttccctcgtg atcccaaacg actcactcct 240
taaattcaca ctttgccact taactccagt gtggatgaca gagcgagacc ctgcctcaaa 300
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa ncccccc                                     337
```

<210> 30

<211> 631
 <212> DNA
 <213> Homo sapiens

 <220>
 <221> misc feature
 <222> (524)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (608)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (615)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (630)
 <223> n equals a,t,g, or c

<400> 30
 agggaaactca ctgtgggtttt ratttgtatt tycttttttta agtgaaagca rgkttattaa 60
 gaaagcaaaag gaataaaagaa tggctatttcc ataggcagag cccattgccca ctcagctgct 120
 tatactttatt gttactttctt gattgtatgc taaacaaggg gtggattatt catgagtttt 180
 atgggaaagg ggtgggcagt atctggaact gaggggtttct cccctttgta gaccatacag 240
 ggcaacttcc tgacgttgcc atggtatctg gaaactgtca tgggtgctggt ggaagtgtct 300
 tttagcatgc tgatgcatta taattagagt ataatgaata gtaaggacaa ccagagggtca 360
 ctttcatcgc catcttggtt ttggtcagct tctttactgc agcctgtttc atcattaagg 420
 tctttattac ctgtatcttg tgccgacctc ctgtctcatc ctgtgactta gaatgcctaa 480
 cctcctggga atgtagccca gtgggtctca gccttatttt actncacccc ctaattcaag 540
 atgggagttt ctctgggttt cagacaaccc ctggacatgt tttccccct cccttttttac 600
 agcagaancc ttaantccca acagtcgtan a 631

<210> 31
 <211> 571
 <212> DNA
 <213> Homo sapiens

<400> 31
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 caaaatgatg agcatttttc tatgatgagg ttttaaccat tattcagggt ggtcttttgt 120
 ttttaaatct ttttttaact aataagattt acggtgtgta ttttatacag aaatgcatta 180
 taaatgtttt taattgtgtt ctgttttttg cagtctttta gtgccatgcc aattgttctt 240
 atattctata gaagttcgct caaaatactc aacaggggaa taggcagcgg acagtcagaa 300
 tggttggaat tttggctttc taagaaaaac tttattttgc ataagcatgt ggtcagatca 360
 ttttgtgcat atgcagcctg gattggatgt taagtaaag cttgttcagt gccggtacat 420
 ttacttaaat ctgtttttat ttttgtcatg tagaatacta ctgtggtcat cataatgtaa 480

19

tctattttctg tacctttttt tttttttttt actttgaagt cttaaataaa atgtataata 540
 cccaaaaaaa aaaaaaaaaa aaaaaaaaaa a 571

<210> 32
 <211> 424
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (413)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (414)
 <223> n equals a,t,g, or c

<400> 32
 tttctaaaaa tcaggaaaat tagttactaa aaattgctga tcatttttgt ttcattatatt 60
 ttgttatttc aaatgtataa gctctgggat tctttttgga gcaataccta caaagtcagg 120
 caccagaatg tgcctcagag ctgtgacatt tcaacatgat ggttttgggt tggtttggtt 180
 ttgtgtcctt tttatttgca gttttttctg ttgcaacaga aagtggcttg gaagtcttag 240
 gtggtatgta acaaattcctt tttaaaaatt ttaaagcagt atttaagtat tcttaaatgt 300
 gtaaattcat ttaatgtttt acttctaatt tcttgtatct tggctgtctg gttttattgc 360
 atttttaaaa aaactgaacc attaagkaat tggaaatgaa tgaaggtgaa atnncatgaac 420
 ctga 424

<210> 33
 <211> 1626
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (525)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (542)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (562)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (607)

<223> n equals a,t,g, or c

<400> 33

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ccacgcgtcc gacgcggcgc acgcggcagt cctgatggcc cggcatgggt taccgctgct 60
gcccctgctg tcgctcctgg tcggcgcgctg gctcaagcta ggaaatggac aggctactag 120
catggtccaa ctgcagggtg ggagattcct gatgggaaca aattctccag acagcagaga 180
tggtgaaggc cctgtgcggg aggcgacagt gaaacccttt gccatcgaca tatttcctgt 240
caccaacaaa gatttcaggg attttgtcag ggagaaaaag tatcggacag aagctgagat 300
gtttggatgg agctttgtct ttgaggactt tgtctctgat gagctgagaa acaaagccac 360
ccagccaatg aagtctgtac tctgggtggc tccagtggaa aaggcatttt ggaggcagcc 420
tgcaggctct ggctctggca tccgagagag actggagcac ccagtgttac acgtgagctg 480
gratgacgcc cgtgcctaata gtgcytkgsg ggggraaacg actgnccac sggaggggag 540
antggggagt ttttcgccc gnaggggggc ttgaarggtc caagtttacc ccatgggggg 600
aactggnntc cagccaaacc gcaccaacct gtggcaggga aagttcccca agggagacaa 660
agctgaggat ggcttccatg gagtctcccc agtgaatgct ttccccgcc agaacaacta 720
cgggctctat gacctcctgg ggaacgtgtg ggagtggaca gcatcaccgt accaggtctg 780
tgagcaggac atgcgcgtcc tccggggggc atcctggatc gacacagctg atggctctgc 840
caatcaccgg gcccggtcca ccaccaggat ggcaaacact ccagattcag cctcagacaa 900
cctcggtttc cgctgtgctg cagacgcagg ccggccgccg ggggagctgt aagcagccgg 960
gtggtgacaa ggagaaaagc cttctagggt cactgtcatt ccctggccat gttgcaaaca 1020
gcgcaattcc aagctcgaga gcttcagcct caggaaagaa cttccccctt cctgtctccc 1080
atccctctgt ggcaggcgcc tctcaccagg gcaggagagg actcagcctc ctgtgttttg 1140
gagaaggggc ccaatgtgtg ttgacgatgg ctgggggcca ggtgtttctg ttagaggcca 1200
agtattattg acacaggatt gcaaacacac aaacaattgg aacagagcac tctgaaaggc 1260
cattttttta gcatttttaa atctattctc tccccctttc tccctggatg attcaggaag 1320
ctgmacattg tttcctcaag gcagaatttt cctggttctg ttttctcagc cagttgctgt 1380
ggaaggagaa tgctttcttt gtggcctcat ctgtggtttc gtgtccctct gaaggaaact 1440
agtttccact gtgtaacagg cagacatgta actattttaa gcacagttca gtcctaaaag 1500
ggtctgggag aaccagatga tgtactaggt gaagcattgc attgtgggaa tcacaaagca 1560
aatagtactc cagaaagacc ctgtctcaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1620
aaaaaa 1626
```

<210> 34

<211> 450

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (291)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (382)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (404)

<223> n equals a,t,g, or c

21

<220>

<221> misc feature

<222> (439)

<223> n equals a,t,g, or c

<400> 34

```

acccacgcgt ccgccggcgc ggtctatggc tgcgacttct ctaatgtctg ctttggctgc 60
ccggctgctg cagcccgccg acagctgctc ccttcgcctt cgccctttcc acctcgccgc 120
agttcgrgga akctctccct aggtcaggtt ggagtgcagt gctgcaatca cggcttactg 180
cagccttgac ctctggggct caagtgatcc tcccacctca gcttaaataga agctgttgct 240
atctctggaa ggaaactggc ccagcagatc aagcaagaag tgcggcaaga ngtagaagat 300
ggggtgggct ccaggcaaca aacggccaca cctgaatgtt gatcccggtt tggcgaaaaa 360
tccctgcaag tcaactcctaa tntcctccaa caaaaacaaa gggnaagttg caatttggtg 420
ggaaatccac cagttgaana acaatttttt 450

```

<210> 35

<211> 960

<212> DNA

<213> Homo sapiens

<400> 35

```

atcttttttt tttttttttt tttttttaaa acaacttctc aaattttatt aactcatgtg 60
gttaacatgg tattgtataa aaagaaaaaa aaaacaccac tcaatactta ctaagccttg 120
cagacagctc agagttgagg cagcatattg ggcatagaga tcataggatt tgtattatcc 180
cttgcaagat ggaactccaa ccaacaccag aattttccaa ttcaaattca gttttagtgc 240
agaccccgag ataattttta gaaaaaagat tggattgttg cttttctttt aattttccat 300
tcctatttag acaaatgacc agaggcaatg acaaaagtaa ctgtttaaaa gggattttctc 360
tccagaagtt ttttctaaag gtttaagtcc aggttttcca tccttctctc catccttttt 420
cattttaaaa agaagggttt tggratwtgt caacctttac tcagcttgct atacaaagcc 480
actgcttttag tcctagacat aatgccagga ctcatctccc aaacttctgg tcttaatacaa 540
gttcatgctt gggttgctaa gaagctcatg ttaatcccaa agtcagcaca atcccaacct 600
taaaaagcag acagcctgat tgcactactt acgacataca ccactctgag gcaaaagaag 660
ccagtcagac accccttgct tgctacgtgt gagacacatc agcagttgag cctgacccct 720
tccgcagagc tcaactgtga aaatcaccag cacaccactg caatccactg agctcaccgc 780
ctgtccagcc ataatggaag tcaactgaag gttatcattg taatagatga ttttccataa 840
gtaactaata aaaatgtttt ctttgatgtt tagacctact aacaattcag tctctccctc 900
tccatcctct cttagggagc ctgtactttt aagcaaatag ggaagctaaa acctcgtgcc 960

```

<210> 36

<211> 530

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (78)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (362)

<223> n equals a,t,g, or c

<400> 36

```
taacaattca atatataatt acacaaataa tttttaaata taatcaatag taaagactgt 60
tctgtggatg gtagtgnta atacattttc tattttgtac agtgatttta ggccaaacag 120
ctgctgattt taagaaaaca aaaggcctga aaccgcctct cgtgtctcct ccctccctcg 180
ccttctcctc tcctagctcc tctcctccag ggccagactg agcccagggt gatttcaggc 240
ggacaccaat agactccaca gcagctccag gagccagac accggcggcc agaagcaagg 300
ctaggagctg ctgcagccat gtcggccctc agcctcctca ttctgggcct gctcacggca 360
knccacctgc cagctgtcag caaggcctgg ggaacttcag ccctggatgc agggccttat 420
cgcggtggcc gtgttcctgg tcctcgttgc aatgccttt gcagtcaacc acttctggtg 480
ccaggaggag ccggagmtgg gagtctggt ggggaacaga ttggaaggta 530
```

<210> 37

<211> 538

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (41)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (502)

<223> n equals a,t,g, or c

<400> 37

```
gccgcggcca cggggcgagc gggccatggt gcgcggcagg ntcttccggc tctcggtccg 60
ggacgtgcgc ttccccacgt cgcttggggg ccacggcgcg gacgccatgc acacggaccc 120
tgactactca gctgcctatg tcgtcataga aactgatgca gaagatggaa tcaaggggtg 180
tggaattacc ttactctggt graaaggcac trwagttggt gtctgtsctg tgaatgcct 240
cgccccacat gtgtcaca aggacctcaa ggacattggt ggtgacttca gaggcttcta 300
taggcagctc acaagtgatg ggcagctcag atggattggt ccagaaaagg gcgtggtgca 360
cctggcgaca sggccgtcct aaacgcggtg tgggacttgt gggccaagca ggagggaaag 420
cctgtctgga attacttggt gacatggatc ccaggacgct ggtatcctgc atagatttca 480
ggtacatcac tgatgtcctg antgaggagg atgccctaga aatactgcag aaagtcaa 538
```

<210> 38

<211> 1256

<212> DNA

<213> Homo sapiens

<400> 38

```
ggcacgagca ttaacaaaaa aatgtgcaaa cacactacta tgatttacca aaagactctc 60
tgcaagtggg aaatcattag ctctagtgtt gctctttgta acctcaggtc tttggggaat 120
ggtgcagaat tagtattgct tccttctttc tgtgtgtgat aatgggtggg gaaggctagt 180
accatctctg tcatacatca aattcccata tgtgaataaa tttatgtatt tttactgcac 240
tctttttata ggtttatcat tcctgcacca acaacgaatg ccattattaa aactttatag 300
```

23

```

aaagtctcaa tatatggcac agtgcttcat ttcttttttt catctagagt gccttagcca 360
ttcttggcct tctgccgttc cacaatatgc aatgtaaatt tgtcagtata atagagaatc 420
cacttatatt tcttcaacag ctattgggaa tatgggtggg attacttcaa ctctatgtat 480
caatttgagg agaattgata tctttataag attaatacaa atcacagcat gtcaaaattt 540
ccttattagg gtagttttta tgccttcaa aaacactgta ttttcttcat atagatctaa 600
gaaaactttg gtgttttatt ctaagaaatt tatagtctct gttttgtaaa tgatatctat 660
tcttaagtta cacttaaaact tatttggtgc tgtatataga aatggaattg acttctatgt 720
acagcagttg caaactgata ttcatatgca gaaagtgaag ctagaccctt aatggataaa 780
agacttaaat gtaagacctg aaagtatgaa actactagaa gaaaacatat gggaaacact 840
tcagtatcct ggcctgggtg aagattttat ggagaaaacc tcaaaagcat aggcaacaaa 900
agcaaaaatg gacaaatagg attatatcaa actaaaaaga ttcagcacag taaaataaat 960
aatcwataga gtgaagagac aaccttcaga agatatttgc aaactattca tctgacaagg 1020
gattaatatt tagaacatac aaggacctca aacaactgag caacaacaac aaaaatatcc 1080
aattttaaaa atgggcgaaa gagccaaata aacatctctg aaaaccagac gcaagtggcc 1140
aacaggtata tgaaaaaaa aaatgctgaa caccgcta atcatcaggaa atgcaaacca 1200
ataccacaat gagatattat ctcatwtggt ctattatcaa aaaaaaaaaa aaaaaa 1256

```

<210> 39

<211> 666

<212> DNA

<213> Homo sapiens

<400> 39

```

tggcacctgc aggactgcga agatctcctt ggcgctgcgg ggccattggc ggggatgggc 60
gggggagggg ggcctcgacg gtttcccatc cccctctggc aaccctaate ttccttctcc 120
atctgggccc tggggcgctc tccaccaccc aggcgggatg ctttaaaaaa aattgctttt 180
taaagtgtct gtcgttgaaa gaaattagtc ttacccttga agtcargggc gcgtcctcgc 240
aatacacatc ttgttaggga aagtgttcgg ctccagctak ggttctacaa ggcgtttctt 300
gttcaccgcc ggagggaagc aggcctccga gtgactgcct tctgaaagtc ggtcttgtaa 360
caattggatg ratgcctttg aagagccctt gtccctattc tatgcttgaa aacagcgtgc 420
agtccaatg ttcaagaacc acgaccacat aaaaacattg ctcccttctt gctgctttga 480
aaacgacccc taaattccgt gtagaagttg ccaggtcgtc ttgacgtaca cttcgtttgt 540
atgatgtttg tctgtcaaat actgtgatgg aagagtgtat gcgggggagg agcagggaat 600
ttttaaaarc attttccggk cacctcagac tgggagatca tgttctttcc tgaaaaaaa 660
aaaaaa

```

<210> 40

<211> 1016

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (6)

<223> n equals a,t,g, or c

<400> 40

```

ctggcnctgc atcctcaaca tcctcaaagg gtacaacttc tcccgggaga gcgtggagag 60
ccccgagcag aagggcctga cgtaccaccg catcgtagag gctttccggg ttgcctacgc 120
caagaggacc ctgcttgggg accccaagtt tgtggatgtg actgaggtgg tccgcaacat 180
gacctccgag ttcttcgctg cccagctccg ggcccagatc tctgacgaca ccactcacc 240

```

```

gatctcctac tacaagcccg agttctacac gccggatgac gggggcactg ytcacctgtc 300
tgtcgtcgca raggacggca gtgctgtgtc cgccaccagc accatcaacc tctactttgg 360
ctccaaggtc cgctcccccg tcagcgggat cctgttcaat aatgaaatgg acgacttcag 420
ctctcccagc atcaccaacg agtttggggg accccctcac ctgccaatth catccagcca 480
gggaagcagc cgctctcgtc catgtgcccg acgatcatgg tgggccagga cggccagggtc 540
cggatggtgg tgggagctgc tgggggcaca cagatcacca cggccactgc actggccatc 600
atctacaacc tctggttcgg ctatgacgtg aagcggggcg tggaggagcc cgggctgcac 660
aaccagcttc tgcccaacgt cacgacagtg gagagaaaca ttgaccaggc agtgactgca 720
gccctggaga cccggcacca tcacaccagc atcgcgtcca ccttcacgc tgtggtgcaa 780
gccatcgctc gcacggctgg tggctggcag ctgcctcgga ctccaggaaa ggcggggagc 840
tgccggctac tgagtgtctc aggaggacaa ggctgacaag caatccaggg acaagatact 900
caccaggacc aggaagggga ctctggggga cgggcttccc ctgtraagca gcagagcagc 960
acaataaatg aggccactgt gccaggctcc aggtgcctcc ctggcytgtc tccccca 1016

```

<210> 41
 <211> 423
 <212> DNA
 <213> Homo sapiens

```

<400> 41
agtgagctgt gattgcaaca ctgcacttca gcgtgggcaa cagagtgaga tcttgtctca 60
aaaaaaagaa ataatactag tttttgtttk tagatthtgt atcctgaaac tttactgaat 120
gttttttagt togaacagtt tttttggtgg agtctttagg attttctcta cttatgatcg 180
tgtcatctgt aaacagagac agttaacttc ctctttccr atthtagatg cttttctttc 240
tcttgccata ttgcctaatt acagcatgtt cctattctgt aaatgttcaa tgaactagar 300
aatgattctt gggtagttaa tattgtcaat gttgatgaac tcttttctt cgctgaaagc 360
agctactttg ttggagggtt caattctgcg tggcaatttg cagcatttct agtggtactg 420
ctc 423

```

<210> 42
 <211> 961
 <212> DNA
 <213> Homo sapiens

```

<400> 42
gcctctacca cctcagttac agacaccacc aaggtcaaac agtgtatttg ctgtcaacca 60
agctgtgtca ccaaactttt cacaaggatc tgccataata attgcctctc cagtccagcc 120
tgtactccaa ggaatggtag ggatgatccc agtatctgtg gttggacaga atggaaataa 180
cttttctact cctctcggc aggttcttca tatgccttg acagcacctg tatgcaatag 240
aagtatccct caattccccg tccctccaaa atctcagaag gctcaggagc taagaaacaa 300
gccttgata ggaraacaag taaataatth ggtggattcg tcaggtcatt cagttggatg 360
tcatgcacaa aaaactgaag tttctgacaa aagtattgcc acagatcttg ggaaaaaatc 420
agaagaaacc acagttccct tcccagaaga gagtatagtt ccagctgcta aaccatgcca 480
cagacgtgta ctctgtttcg acagcactac tgctcctgtg gcaaatacgc agggggccaaa 540
ccataagrtg gtgtcccaaa acaaagaaag gaatgcagtc tcttttctta atcttgactc 600
acccaatgtg tctccacct taaaaccccc ttctaataat gctatcaaaa gagagaaaga 660
gaagcctcct ctgcctaaga ttttatctaa atcggaaagt gccattagcc ggcataccac 720
cataagagaa actcaatcag aaaagaaagt ttcaccaaca gaaattgtgc ttgaatcttt 780
ccataaagca acagctaata aggagaatga attatgcagc gatgtaggaa agacagaaaa 840
atccagaaaa ttcaaaacta tctattgggc agcaaaatgg gggtttgca agtgagaaat 900
ctatagcttc actgcaagaa atgacaaaaa aacaaggcac atcttcaaac aataaaaaatg 960

```

t

961

<210> 43
<211> 545
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (12)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (34)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (142)
<223> n equals a,t,g, or c

<400> 43
ccaccgcggt gncgaccgct ctagaactag tggntccccc gggctgcagg aattcggcac 60
gagttggagt cctttgctgt tcccaatttg tggagagtg aagacatcac ccaaacgtg 120
gccaaactatg ggctcatatg tnttactcgg gctggaaatg atgctcagaa gtttatctat 180
gaatcggatg tgctgtggaa acaccggagc aacattcacg tggatgaatga atggwtcgt 240
aatgacatct catccacaaa aatccggaga gccctcagaa ggggccagag cattcgctac 300
ttggtaccag atcttgtcca agaatacatt gaaaagcata atttgtacag ctctgagagt 360
gaagacagga atgctggggg catcctggcc cctttgcaga gaaacactgc agaagctaag 420
acataggaat tctacagcat gatatttcag acttccatt tggggatctg aaacaatctg 480
ggagttaata actggggaaa gaagttgtga tctgttgccct aaactaaagc ttaaaagttt 540
agtaa 545

<210> 44
<211> 377
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (301)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (347)
<223> n equals a,t,g, or c

<220>
<221> misc feature

<222> (359)

<223> n equals a,t,g, or c

<400> 44

```
cgatcaccccc cgaaccattt catcacgtat tcttcagtgg ctggacgagg agctgccccga 60
cctgtccgtg tctcgagaa gtagccactt gcaactggggc attccggtgc ccggggatga 120
ttcgagacc atctatgtat ggctggatgc cctgggtcaac tacctcactg taattggcta 180
cccaaagtct gagttcaaat cttgggtggc ggccactctc atatcatagg taaggacatt 240
ctcaaattcc atgccatcta ttggcctgcc ttctgttar gggccggcat gagcccgcca 300
nagcgcatct gtgttcatt cccaatggaa cagtctgtgg gccaaanatg tccaagagnt 360
tgggcaagtg gtggatc 377
```

<210> 45

<211> 440

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (387)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (416)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (436)

<223> n equals a,t,g, or c

<400> 45

```
ttggacatcg tggccaactc tatcaagacc acaaatacca cttacaatta attttaaatt 60
attcatctgt acatagtttt ctaaaatgta tataattcaa acagagcatc ttgtaactga 120
agacacacca tatctatgat atcgcattag tccatgtggg gaaaagaaag atcagattgt 180
tactgtgtct gtgtagaaaa ggaagacata agaaactcca ttttgatctg tactaagaaa 240
aattgtttct gctttgagat gttgttagcc tataacttta gcccactc tgtgtctaca 300
gaaacatgcg ctgtaatgga tcaaagttaa atggatttag ggctgtgcag gatgtgcctt 360
gttaacaata tgtttggcag gcggtangcc ttgggtagaa gtcacggcc attccnccat 420
tccccggttt aaccnngggg 440
```

<210> 46

<211> 525

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (345)

<223> n equals a,t,g, or c

<400> 46

```
gtccggctgg gccgggacaa aagccggatc ccgggaagct accggctgct ggggtgctcc 60
ggatTTTTscg gggttctgcg ggcctgtgga agaagcgccg cgcaacggac ttcggcagag 120
gtagagcagg tctctctgca gccatgtcgg ccaaggcaat ttcagagcag acgggcaaag 180
aactccttta caagtcatc tgtaccacct cagccatcca gaatcggttc aagtatgctc 240
gggtcactcc tgacacagac tgggcccgcg tgctgcagga ccacccctgg ctgctcagcc 300
araacttggg agtcaagcca gaccagcttg atcaaacgtc gtggnaaaac ttggtcttcg 360
ttggggttca acctcactct ggatgggggc aagtcctggg ttgaagccac ggttggggac 420
aggaagccac agttggcaag gccacaggct tcctcaagaa ctttctgatg gagccyttcg 480
tccccacag tcaggytkag gagttctatg tctgcatcta tgcca 525
```

<210> 47

<211> 414

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (403)

<223> n equals a,t,g, or c

<400> 47

```
ttagaaagar agggggctgg gggccgagac ttctgggtcc ctgtatgttg cagagggttg 60
catgtcatct ccattggagaa ggctgtgtac gctgtcacgc aatcccttgt aagaggccag 120
gcccttgggg gaggaggag cagctgtggc tcacacagcc ccaggaaacc acctcttct 180
tcagtgaagc agatagatag agaatcccggt gacagtgaca ggcaagtga tagccagata 240
gaaagcattt ttgtgtaata actaattttt gtttgcttct ctctctctct tccccgccct 300
ccccatccgg attcccggtg ctgtgtgcat ctctgscgtg tgtcccatg tctgcccga 360
gtgcgcttct ccgagaaggt cactgtccat tcctgggtgt ctnggcaagg ccgg 414
```

<210> 48

<211> 323

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (11)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (274)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (321)

<223> n equals a,t,g, or c

<400> 48

```

tcgggtccgg nattcgccgg tgccggggac agaaacctcc tgccttctta gttcataacc 60
cccccttaca ttagattcta accctgtggg gatttttaggt tgggatttgg gcgcctgcag 120
atggctccga agccagcctc ttgtgatccg agccacttct ctggcactcg gagecgtggc 180
accgcgggag cccttgggtc accggaccgc ctgggaacct ggccggggtc tctggcagcc 240
tcccagggtc gaggttcaga ctctgttccg cctnaccag gtccacacct ggatagggct 300
gggagttgag gcttggtttt naa 323

```

<210> 49

<211> 841

<212> DNA

<213> Homo sapiens

<400> 49

```

tcgacccacg cgtccgsaga ttccagcctc acatactaag taaatactga taaataagga 60
aattagaaat ttagtattca taattaaata tgctctaaaa tttcckrtac ttttatttcc 120
tgtttattct taggttagatt ggaaggggga aacagtctgt tctccctaata taaatttttt 180
ctaataacga ttagtagaat atggacattc tatatgacag tgacattaaa agaggctctt 240
tggaagtata tacattatta acataatgtg tacaagtcct tttgaaatga caactttaat 300
gggtttcagc tcttttatct agagcttgag ataattcaag ctgagttttt cagggcatat 360
cacaacggca aagtgttcag cagtgggata tcaatgctta tttacatttt cctactgcta 420
tttatataaa atgttattcc attcagagga tgctttttat cccacatta aagcacagat 480
cattaagcaa taaaaaccaa attgtctgtc attcaaatta taactgcagt tatttttgca 540
tggtaaagag gaggtgctaa ttttgtgtga gatgaacttt gtaaaactact ttgggaaatg 600
ttctttggaa gtaagggttt ttctccttta gtcttatgct tccacttttg tctcagattc 660
acaatccatt aaaamawggg gaaaaaagaa aargtaaaat tgagagactt ttgttagagg 720
agctatttgg aatgaaccaa cattycasat ttcccaaaat gtaagttagg aagtctccat 780
kgycykgcc attacaaaaa tacactgkta ctatcttaat ctcaagagtg tcattacagt 840
g 841

```

<210> 50

<211> 534

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (423)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (430)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (524)

<223> n equals a,t,g, or c

<400> 50

29

```

aggaaattta gaaaatgatg aattcttgtc catttttgta atcaagattt taggaaaaac 60
agaagtacat ctatctttat gaaattttgg gcaggttttt gtgtatcaat attttgtact 120
tttaggggaat attttatttt ttagttattt gtgtcaaatt ataattataa aaggtagagc 180
agaaaaatata ccatgttttt atatagggtc acacctgtac ttaggagggga ccctgtccat 240
ctatatactt tttgtataaa attttaaaat gttaaagatc cacaagggtc taataaaatg 300
attctatagc tagaaaaacc attaccttcc cagtggcttg cactaaaata tacctgggaa 360
aaggaaaccta gaaagactgg taactaatgc ctggaaatgt tctatattga atgtaccatg 420
ccnctggtnn gggaaaaatg tactaataat gggaatggga aataaaccca gaaatccgaa 480
gttaattcca gcctaaaaaa aaaaaaaaaa aaaagggggg gccncccta gggg 534

```

<210> 51

<211> 317

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (222)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (250)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (265)

<223> n equals a,t,g, or c

<400> 51

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ggcacaggaa aaagcacttt cttaagccta cagtatcaga tcaatgggga aaacaacaga 60
aaactaagag gagaattttc ccgttaattt tcttgcagaa aagtataagt ctaattgccc 120
attgccataa attttgtctt gtactcagag aagcaacatg cactggctca ttttatgtgc 180
aaagaaaaga tttcaccatt aaaaaaatta acttggctag gnatgggtgc tcacactggg 240
gaatcccagn cactttgggt ggctnaaggc agatagactg cttgaaacct aggaattcaa 300
gaccagcctg ggacaac 317

```

<210> 52

<211> 1789

<212> DNA

<213> Homo sapiens

<400> 52

```

ggcacgagga aacggacaac aatgttggtg ccaaaactgg atcaggctac cataatcttt 60
tttcttacat tccacttttc tatcttttcc aaatatcca cagtgatcat gtattaattt 120
ttctcttatt ttgatgttgc aaatatattt tttattatgg aaaacggcaa gctacatatg 180
gggaaaaaga aaaattgaaa ttatgcaatg gcctaccact caagagataa ttattaagat 240
tgtgggtgtac ttttttctat atactttttt ttaaaggaaa ggatcttact ctgtcgacca 300
gcccctcacc tcctttgact agctgggatg acagcacatg ccaccatata caagtatttt 360
tgtatttttt gtagagaagg ggtttcatta tgttcaaact cctcagctgg cctgcttgat 420

```

```

ccgatgcttg ttagccttga catttacaat gaacacaagt gtgttgccat cttctgtctt 480
cttcacagac aacttagtag tcaggggaaac ttgatgatgg ccaagtggc aagctcctca 540
gggctgtctt ccgtggatac ttgagctgcc ccaggagcca cagcgtctca ggcagctgaa 600
aagtgagtga catgtagggt gtgtgtgtgt gtgtgtgtgt gtgtgtatgt gtgtgtgtgt 660
gtagctgtaa cacctcagcc ttgcctcctt ggccttcaca gcccttgctt tagctttggc 720
tttgagagag gcagaggctc cctcttttgc cctcactgtt atcttggtga aaagccagtt 780
tggcagtttc tttttttaaa aaaatgcaag tatcataatt cagcaatcac atttgggggc 840
aatttatccc agagaaaggg aaatttatgt tcacataaaa acctgaatta acttcaaggg 900
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gactggataa ttataaaaca gcaggagttt atttctcaca gtttcagagg ctgggaagtc 1320
caagatcaag gtgccggcag gcttggtgtc tagggaagga tcattcctta tagatggtag 1380
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attttgaggg gaatgcaaac attcaaaca cagcactccc tcatctatag atttctacaa 1620
ctttcagatt attgcagcaa gtggttccat ctgtaaatca cttggctagc ttatgtgtgt 1680
tgtctctctt ccataacaca tcaaccgaag atttccaaca aaagaataat aacttaaaac 1740
aacaacaaaa aaactcactc acacaaagta tgtgtataag caggttgta 1789

```

<210> 53

<211> 654

<212> DNA

<213> Homo sapiens

<400> 53

```

aattcggcac aggcatgggt gtccctctgt actcagaatg gggtcagacc aagtcggtra 60
aratggatgt tggcaaaata ggaggatacc ctcatattgt gaatggggga cctgctctga 120
gcctgcccag kggccaggcc tgctccaggt taaactggac ggaaggccca ggtctcagtt 180
tctttcaacc aggagaggcc gctgcctaga gcccctcccc accttttctt ggatgggtga 240
ggcaagccag gagagcaagc agtgttgctc tcacgggagg aggactgagc gactgggaaa 300
actcggctct acatctcacc cagaacggct tttagaaaca ccacagctgg agagtcctgg 360
ctgagccttg ggagtttcag ctctttggcg gggtgcccag gtgccatgcg atcagcgaag 420
cctgcgagtt ggcaggactc tgaggtttcc tgcagaccat gccatgagat tgaagggtgcg 480
gggaaataaa gaaaaatcac catttaggag actccattct ttccctacaa cccagctgtg 540
gtcccagaga tcaggggggtg ttgccagggt tggctgggga agggctctggg ttcacaaact 600
caccggcact ctttagtccc cgtataacat ggtgggttaag gataaagatc ttga 654

```

<210> 54

<211> 334

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (154)

<223> n equals a,t,g, or c

<400> 54

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ggcacgtagg ggatgccac cgccagtcac aggggtgggg gtggtctctg caccttaagt 60
actaacctgc cgcccacgcg cctcctgacc acagcaccac gtcggttttc taattctgtg 120
agctgccctc gtgggcgtgg cctccctgtg gagntcccca tgtgcctccc cttggtccag 180
cctgcagcta ggaagtgggt cacagcgacg gggctgggct gggccaggcc aggctccggg 240
agatgtggaa ttggcgaaac aactgcccc gtagtatcct ccgcctaggr ctccaagagg 300
tggaattgg ggcactacgg cgggtaagg cagt 334

```

<210> 55

<211> 474

<212> DNA

<213> Homo sapiens

<400> 55

```

tgcaaacatg atggatgggg aaagcatagt aactgtactc accaacaaga tgctggagtg 60
acctgctcag atggatccaa tttggaaatg aggctgacgc gtggagggaa tatgtgttct 120
ggaagaatag agatcaaatt ccaaggacgg tggggaacag tgtgtgatga taacttcaac 180
atagatcatg catctgtcat ttgtagacaa cttgaatgtg gaagtgtgtg cagtttctct 240
ggttcaccta attttggara argctctgga ccaatctggt ttgatgatct tatatgcaac 300
ggaaatgagt cagctctctg gaactgcaaa catcaaggat ggggaaagca taactgtgat 360
catgctgarg atgctggakt gatttgctca aagggascag atctgacctg aractggtaa 420
tgagtcact gaatgttcag gaagattaga agtgagattc caaggagaat gggg 474

```

<210> 56

<211> 367

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (250)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (252)

<223> n equals a,t,g, or c

<400> 56

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ccggcctcaa gcaatcctcc cactggcctc acaatgttgg gattacaggt ataagccact 60
gcacacggcc ttactatgct atcaattcca tatatggaaa ggtgttttcc ctttcagagc 120
tcttttaaagc tctgcagaag atttacatgt gtttatagag ctaagagaaa tcagggcatg 180
gaaattgagt gtgtaataaa aattaaactc ttcattgtat ataactatgc ataacttcta 240
tcttcattcn cnggaagtgt cctagagcac catcacagct aggaagcttc catcatggat 300
taccttattt cccaaagcaa gtactccaat aattgtctca agagaggaag gacaactggg 360
taccagc 367

```

<210> 57

<211> 564

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (542)

<223> n equals a,t,g, or c

<400> 57

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caacccccta cagatatcaa gggaccacta tacacattag gatgatctat attgaaatct 60
acatggaaca gagtgggact tctaattgta tgacttcaag attttgcttt gtttaaatta 120
ataactgttt tcagaattaa gtgcttaaaa acaaatttga ttgaaaagtt caagacaaga 180
attttgctct ctatggctgt tccatataaa tttgatgggt gattctgaat gtaaagact 240
gaagaattaa aaaataagaa attccttttt aaaaggcatg cctcttgac tgtgaacaag 300
acagtagtcc cttaaaccat gaatatgtca gtgttctatg gattacgaaa ttagtaatgt 360
tgcttagccc aaacgtgttt tttaaaaagt atagttttgt acatctcyaa gttatcaaac 420
ttcaaaattg agaacaaatt taaaagtcca tatatgcaac tctagtaagc acttaatagg 480
ttacatagca ctggttaaga acaattaatt ttgtttctat attattacta attattatta 540
cnaatcaaaa aacactgtga taag 564
```

<210> 58

<211> 444

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (358)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (382)

<223> n equals a,t,g, or c

<400> 58

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ggcacgaggg aaaaccataa ctgcctctta atttaacata gaataataca tagttctgta 60
tttttttttaa agtgagctta atgggtaagt attttttata tgcttttagct atagctaaag 120
aaaactgata cttaacaaag ttgaatagta ttattcactg gtgctcctaa aatattgttt 180
ttcagtgtaa aatatgcata tcttctatat ttaatatgaa agtcttgaaa tgtatcagac 240
agaagggkat ttcagtttgc aaataatgag caatgtagca attttaacac atttcataaa 300
tatatatattt gtcattggtg gagagcacca tttgttggtt tgaatatact ttaaaggnaa 360
gaggtacaag ggacataaat gntgagatta cctacaggat ggaaatagca gtacagttcc 420
attggtagat attttgaaat gttt 444
```

<210> 59

<211> 347

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (327)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (328)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (340)
 <223> n equals a,t,g, or c

<400> 59
 ttgagctcta aatgcaaaac tcttttatac tgaaaaaaca cttaaagyag ttttgtgtgg 60
 catcacagtg atttgtcatg aaaagccata tatgggggac atgctaaaat ggcttctgaa 120
 tgaaatacga cagcagagaa agatgccact gaaatgctga aattatcttt gctgagcagc 180
 ttttgaatgc taagggttcc agtatgtgac ccaaagaagg agttgtctca actccttggg 240
 acagggttca ttcaaaccac caagctgtga gagtgtgttt atttttaatt ttttaaaagg 300
 tatttaattt ccaaccacac ttcttanntt tttggaaaan gacaatt 347

<210> 60
 <211> 322
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (245)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (321)
 <223> n equals a,t,g, or c

<400> 60
 agctggggcc aaaaatagac cagaattatc tgctacttga atgtttggca aaactctcct 60
 agaaaactga gtctgatgtt tgatttgtgt aaagacttct ttaacttttc taactcaatt 120
 ttactaagt tataggacta ctcagatttt gtttcttttt tgctcaattt tgggtcaattt 180
 tgtttttgtc tatgtcacct aagtttycaa atgtattggc atgaatatat ycataatatt 240
 ccctnattat cttttacatt tctggggtat cttagcgggtg tttccctttt tatccctaaa 300
 atgtttatcc atgctttctt nt 322

<210> 61
 <211> 834
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature

<222> (793)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (810)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (814)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (834)

<223> n equals a,t,g, or c

<400> 61

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gatatgatgc cctccttca taattatgta acagttgata cagacacact tctgtctgac 60
accaagtatc ttgaaatgat atacagtatg tgcaaaaagg ttcttacagg agttgcagga 120
gaagatgcag agtgtcatgc agcaaaattg ttagaggcca tcattctgca gtgcaaagg 180
cgtggcattg accagtgcac tcccttattc gtggaagcag ccttagaaag actgacaaga 240
gaggttaaga caagtgaact tcgaactatg tgtctgcaag ttgcaattgc agctttgtat 300
tataatccac acctactact cmatacctta gaaaatcttc gcttcctaa taatgttgaa 360
ccagttacma atcattttat tacacagtgg cttaatgatg ttggactgtt tcttggggct 420
tcatgacaga aagatgtgtg ttctcggact ctgtgctctt attgatatgg aacagatacc 480
ccaagtttta aatcagggtt cyggacagat tttgccggcy tttatccttt tatttaacgg 540
attgaaaaga gcatatgcct gccatgcaga acatgagaat gacagtgatg atgatgatga 600
agctgaagat gatgatgaaa ccgaggaact ggggagtgat gaaagatgat attgatgaaa 660
gatgggcaag aatattttgga gattctggct aagcaggctg gttgaaagat gggagattga 720
tgaaagattg ggaagaaaga tgatgctgaa agaaactgct ctggaaaggc tattcccaca 780
atcattgatg atnaaaaaat aaccctgtnn gatnaatttc caaatatttt aaan 834

```

<210> 62

<211> 1796

<212> DNA

<213> Homo sapiens

<400> 62

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aggggcaaac ctaacctggg atctgacggg atgcgttttg ccagctcaga tctcctctgc 60
tactggaaac ttgcattatt tacagccatt aggagctccc tggcttccat tccactcatg 120
actagcttta cctctttgac cccactgtat tattgtctag cccagttcag ctgaatcttt 180
caacacaaaa tatacaggga accccttccct ggggaacttc ctttggtatt gaggtcttcg 240
ctgatggctt cttccatttg atactcagtc tcagtcacag taggattacg gaatcttttg 300
ccagagtatc aatctacatg ggtgctacac attactgaaa aaaattagga acatgggtgct 360
agttaattca agtcttcatg taaaacttct tctatcatag tggacattaa aaaaaatctc 420
tctgcaaagt gcattgaccc tacctctagt agatgaatgt tgaacaagta gcctatctag 480
gaagcaagtg actagcatcc atgggcatcc cacaggttgt agtccagccc cgatcttggg 540
ggttgggatt gatgttgctg ccaagtcctt ccgtttcatg ttcaggctct gcctatgttc 600
ctgggtgtctg gtacctgatt tttcaggatg ctgacattta cttcttgccc acaacaccat 660

```

35

```

ataccctaag tcttgccaac atctttgaat gtctttctgct ggtctgtctc tcctccgttg 720
ttcttttact atgtcccaag tgcattgcttt gttcagtatc tgcctaagtc tcaggatamt 780
gatttttagct ttttactagg tcctgacatt cccgtagttt cctcttacct ttctggacat 840
gccagacaaa ctctgacctt aggttctgtg aaaactggta cctgcagaat tcctcagtgt 900
ttgtttatat gaaagtccat tgtgcctctt gattgtgggt gagttgagga aaagaggtaa 960
agcagtgggc agaggttgca acatttattt gggtatagga cacccttgct actggagcat 1020
cttgtagggg aatgtagttc agaacatgca tggagaaatg ctgccataga gtagtagtga 1080
catttgggac ttgaaaaaaaa tcttaagagc aggtataatt cctcaacaa cagaagaaca 1140
tcagtgtctt agaatgtttg attttgaact ttcttgatgt tttctctgcc gttctgtagt 1200
gttattctaa ttaaaatctt tcctctaaac tctgtctctt tttttccaat tgagcaaatt 1260
cggcatttat tgaggcccta ctacatgtca tatgtctgtt tatttgctgg aaacacaaat 1320
gtgaatatgg taggcctgcc cttaacaat gaattacagt gtaaaatgaa ccttttataa 1380
agctggctct atatcaatct aattattttg tttttcttca tttcaggcct aagacagctt 1440
tattttcttt ccactccaaa taatgaagaa tccccctagg gcaaagaagg aatttctgag 1500
catgttataa aaaaatagaa aataggataa gttgcgtgaa gatttaatat ttctatacat 1560
caaacctac cataaacaaa attaaaaggc aaatagtaaa cttggaagaa catttgaac 1620
ataaaagaca aaagttaaat atcataataa aataagcaca tagtagcttt tagtaaatca 1680
ttgctgaatg aatgaatata tatatgaatt caaagcaatg aaaaaatcac ccaggaaaa 1740
gatgtaacaa tttgacatag gacaagtcac caaaaaaaaa aaaaaaaaaa ctcgta 1796

```

<210> 63

<211> 1376

<212> DNA

<213> Homo sapiens

<400> 63

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ggcacgagtt ttggactagg tgcacagtt attaaaacaa cttttaaccc tcccccttca 60
cacacataca tatcagggtt ttttctagtt aaaaacccaa gtagctcaga ttctacttta 120
atgtcagtgc agatttgcat tgaatcatgc cattatgttt tttctcattt ttatgctgtt 180
gggtcttagt ttttaaatg atataaagaa ctacgaatg gttttatttt ctactcatac 240
ttaggggtta ggaaacacta ccactagtta tcatttaatc aacttcaatg gtctactgaa 300
acaaaaatgg taacttttca ttagtggtt atttagagtt atagtagttg tttccagaaa 360
acacttcctc acaattgtac ttcccaatca aatcatgtga tcatcacagt attcccatga 420
aaggcagaat gtttgtttca aaattaatct agttttctgt acattttaat ttgagaaggt 480
gacaactggc tcttttccag tcttccctca tgtcagtttt ctgatagacc actattggca 540
aacagtatct gtcaactacc aaatgtgtaa aattttctgt atttcacttt gtcttatttg 600
taaatagtga actaaaactt ttggcagatc agcaacattt gctgagcctg ttttttaagc 660
taatgtgtat tcttactaat gttcctatca agaattgatt tgtaatatat gctgtctatt 720
tctaattgtc acattcatat tttgaggttc tatcttattt taatagagaa cagacttctc 780
aaaaaaaaat cagaagcagc ttattattga aatatcgaaa tattgaaata aaccgggtgg 840
ggtttagatta ctcatctgtc caccaagtgg gacatttgca tggactgggg gcttaaagga 900
cttagaagag acctgtaagt aaatcctgaa aatgagccaa tccccacttg aatggttact 960
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tctggttcat ttttcttttc ttcatttgtg atgctcagat tcaaaatgtg tgttctacac 1080
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gatttgtggc aaatcattta tttgcctttt taaaaattca ttttaagcag tcagagagta 1260
gactactcag aaaattattt cacgtaattg tctaagaggt caatattttt taatgcatat 1320
tgaatcaaat aaagtgtctt aaagaaatta ttctccaaat aaatttttaa aaaaaa 1376

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<210> 64

36

<211> 574
 <212> DNA
 <213> Homo sapiens

<400> 64
 ggacagagct gaaaggtggg ggaagggaac gtagacctag agaggggaat tcttacagaa 60
 atcctctttt tttggtccct tctatttttc agtctccggc agcctcttgg tcatgaaagc 120
 cctcagattg tcggcttccg cctcttcttg ccttctgctg atcaacgggt taggggcagc 180
 acccctgggt cgccttgagg cgcagctcct cctctcagct ctgagcataa agagccggta 240
 gccggggacg cagtggcccg gccaaaggat ggcagcgccc cagaggtccg aggcgctcgg 300
 aattccgagc cgcaggacga gggagagctt ttccagggcg tggatccccg ggcgctggcc 360
 gcggtgctgc tgcaggcact cgaccgtccc gcctcacccc cggcaccaag cggctccag 420
 caggggcccg aggaagaagc agctgaagct ctgctgaccg agaccgtgcg cagccagacc 480
 cacagcctcc cggcgccgga gagcccgag cccgcgtccg cctcgccctc agactccgga 540
 gaatgggccc gaggcgagcg atccctccga ggag 574

<210> 65
 <211> 603
 <212> DNA
 <213> Homo sapiens

<400> 65
 cccacgcgtc cggctggact gttttgatct cttttaattg ttctgacaga tagttgggga 60
 tgagagccga ataaggtttg cctgaaataa ctgacactat ataatttctg ctttggcaaa 120
 tactaagttc taacttgtca ttccctggtag aacaagcttt atttttcgag cctagcaatg 180
 atctagaagc agatgttata tcagtgcctt ttgcaatttg ttgtgtgggt tttttttttt 240
 ttaaagccac acaataattt tggaaaacaa tgtatgggta gaacatgtgt ctgttaattg 300
 cacacaaaac cacttttaat gggtagacag ttaaatttga aggaataagt tcataatact 360
 gaagctagaa ccaagcagaa tctgtttttt tctgaggagt atcggtagca taaatgtgat 420
 tataaacata gtacacttga tatatggagg cagtgcagc tattttttaca aaatttaaat 480
 ctgcaaatgg attcaacatg tttatgggtt attaaaattg tctgatttct taggttcttt 540
 atagtacacg tgttgaaaat aaatgattaa gaattgtttc aagaaaaaaaa aaaaaaaaaa 600
 aaa 603

<210> 66
 <211> 1772
 <212> DNA
 <213> Homo sapiens

<400> 66
 tcgaccacg cgtccgggag gatccccagc cgggtcccaa gcctgtgcct gagcctgagc 60
 ctgagcctga gccgagccgg gagccggctg cgggggctcc gggctgtggg accgctgggc 120
 cccagcgat ggcgaccctg tggggaggcc ttcttcggct tggctccttg ctcagcctgt 180
 cgtgcctggc gctttccgtg ctgctgctgg cgcactgtca gacgccgcca agaatttoga 240
 ggatgtcaga tgtaaattgta tctgccttcc ctataaagaa aaattctggg catatttata 300
 ataagaacat atctcagaaa gattgtgatt gccttcatgt tgtggagccc atgcctgtgc 360
 gggggcctga tgtagaagca tactgtctac gctgtgaatg caaatatgaa gaaagaagct 420
 ctgtcacaat caaggttacc attataattt atctctccat tttgggcctt ctacttctgt 480
 acatggtata tcttactctg gttgagccca tactgaagag gcgcctcttt ggacatgcac 540
 agttgatata gagtgatgat gatattgggg atcaccagcc ttttgcaaat gcacacgatg 600
 tgctagcccc ctcccgagc cgagccaacg tgctgaacaa ggtagaatat ggcacagcag 660

```

cgctggaagc ttcaagtcca agagcagcga aaagtctgtc tttgaccggc atgttgctct 720
cagctaattg ggggaattgaa ttcaagggtga ctagaaagaa acaggcagac aactggaaag 780
gaactgactg ggttttgctg ggtttcatct taataccttg ttgatttcac caactgttgc 840
tggaagattc aaaactggaa gkaaaaactt gcttgatttt tttttcttgt taacgtaata 900
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gacttttact aataaaaata aatctgcctg taaaataaat taaaaaatcc tttacctgga 1020
acaagcactc tctttttcac cacatagttt taacttgact ttccaagata attttcaggg 1080
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aaccattatt ggataactgg ctttttttct tcctctttgg aatgtaacaa taaaaataat 1740
ttttgaaaca tcaaaaaaaaa aaaaaaaaaa aa 1772

```

<210> 67

<211> 1829

<212> DNA

<213> Homo sapiens

<400> 67

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cggcagcaga ttggagccta tttagtggat tttatgcagc caaagatggt tcttggtgtt 60
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atthttgatta ttatgcctgg caggacgcca ctagtggcat ctagtggatg gagggtaagg 180
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caaatgtcag tagtgctgag gctgagaaac cccactctgc tctctaacca aaattagaca 300
cagaaagtgg agacattcta ccaccctgac aacatcaatg gcttttgccc atttaaaaca 360
agaaagagga atatgtatcc aacccaaaac aacatcttaa cattctttct aataggcttt 420
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gcacatgtat actgattaat ttctttcttt tttccttctt ttgatggagc aagactgtaa 720
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ggattttgag atgggggagag tatcttggat tagccaggtc tgtgagaact cctgacgtct 1500

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38

```

gaagcttgac tcccaagttt ccatagcaac aggaaaaaaaa aaaatctatc caaatctgaa 1560
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ttctttacaa tttcacttag tctgtacttc atcattttga cagcatcttc ctccctcctt 1680
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tcttctggga gcaggaacaa tgactacttt ttctggtgtg ttaacatgtc ggtgccgaat 1800
tcgatatcaa gcttatcgat accgtcgac 1829

```

<210> 68

<211> 1688

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (912)

<223> n equals a,t,g, or c

<400> 68

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accacgcgt ccgctcatgt ggacttatgc cagtctagag gcagaatcag aaggcttggt 60
tgaacatata gctttccctt ttctctctcc ctccgcccct cccagtacag tccatctttc 120
aatgttgcag cctggttgag aaggagagaa aaagggtggca ggaatttcca ggagatcccc 180
aagaatgctg ccttgtctgt ggacaaagat ggaccatgtg cccttcggaa ttagggatag 240
aaacaaatat tgtgtgctct taacgattaa gctgtgttat ggtgggtttt cagggttttta 300
ccttttttct ttaccctttt actctgcaag aatggggaaa gaatgcatac tgcgaaaatg 360
agtcttttaa attctgtctg cctactagtt ttaagtatat ggtatgttgt aaaatttcca 420
atgatgagag acagcacaat aaatgtacct tatctcctta ggctgaaggc cataactaca 480
tagtggagta atttaagaac tctcttgcc tcccaaccc aaaagggtgc tttttgatag 540
caactggcta atgaattttt aaaaagagaa gaaaaatact agttttcccc tcttttggga 600
aatagatttt aaatggctaa actactagcc ttaaaactac tagtctataa atcaactacc 660
acttttgtga atctgacagg ccacattttt atatggccct ttacagaatg gagtgtgttg 720
aacaggatac taacgccatg gagttgagct gggcctagcg atggagggac actctaacac 780
aactttccct cagctattat gcaacagatc agggaaaaag atgggatgac agatggggtc 840
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agagagctca accggcaatc tcaggtgcat ttaacatttt taaaacgaaa cagttagttga 1560
ccaaattttt cttcttaaaa aattggaagt ggggggaatc caatgacaaa aactaatgtg 1620
gcttgtttct ggagaaaata attactgtaa atggaacaac aacaacaata aaacacacgt 1680
taaacatc 1688

```

<210> 69

<211> 565

<212> DNA

<213> Homo sapiens

<400> 69

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acacaaaaca ggctcaggac ttagcaagaa gttatggaat tccttttatt gaaacatcag 180
caaagacaag acaggggtgtt gatgatgcct tctatacatt agttcgagaa attcgaaaac 240
ataaagaaaa gatgagcaaa gayggtaaaa agaagaaaaa gaagtcaaag acaaagtgtg 300
taattatgta aatacaattt gtactttttt ctttaaggcat actagtacaa gtggtaat 360
ttgtacatta cactaaatta ttagcatttg ttttagcatt acctaatttt tttcctgctc 420
catgcagact gttagctttt accttaaatg cttattttta aatgacagtg gaagtttttt 480
tttcctctaa gtgccagtat tcccagagtt ttgggttttg aactagcaat gcctgtggaa 540
aaagaaactg gaatacctaa gattt 565
```

<210> 70

<211> 675

<212> DNA

<213> Homo sapiens

<400> 70

```
ccagcatcag aagttctgat ggatgatgac cttcagaaaa gtgtggatat gatcatggat 60
atgttttgtc ctccaggaat aaaaattgat gcatatccgt gggtggaatg cttcatcaag 120
tcatacaatg tcacaaatgg aacagataat caaat ttgct atcagatttt tgacaccaca 180
gttgacagaag atgtaatcta atattgccat ccaatttagc atacataaaa tgttgccact 240
caccttcctt gtttgagctt cttttcctga cctgagtttt gtatcagcaa tgttgatgat 300
gttagcatgg gtatgggatt agaaaatgtc cttaccttaa atctcttggc ttttactggg 360
tgcaaggtaa ataatggcta tggattttgt tttgctttct gttttgcttt tgtacaaaga 420
gacctgctta aacaagtact gctgagataa gtgtctgac aagctacagt gtactttaag 480
tagaaatggc aaagt ttgctt tgttggggtg ctgatactga tgattttagg ataaattcat 540
ttcttttaac ttgtaataca tggtttttatt gcttgtttct cyccaggata gtagagattt 600
ctctatttca cctcaamcta ataaaagtgg tcagattttat aatgttaaaa aaaaaaaaaa 660
aaaaaaaaaa aaaaaa 675
```

<210> 71

<211> 270

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (247)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (260)

<223> n equals a,t,g, or c

<400> 71

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ctgagatgcc acaagaagca gcacagtgat cagagtgaga acaagaactc agacttggtc 60
accttccac cggaagcgg tgcccgga cagctcagca ccctgggtct cgtggggcag 120
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40

ctcgaggctc ccctagagcc cagccaagac ctctagctca gccgaagagg gtgggtcagct 180
gtcggaactt ctgaccagtg ctgttgccca gccctccaga ggtgaggcca ctgagagaca 240
ggctttnggc accacttctn gggctggccg 270

<210> 72

<211> 538

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (101)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (302)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (449)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (459)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (521)

<223> n equals a,t,g, or c

<400> 72

tatctcttgg cagcaggggt tgcaactgag aaacatgcaa ggtgggggat aattggatct 60
tgtgggtcag cctaccaaag tgctgggatt acaggcgtga ncaccatgct cggccagtca 120
gtatcatttt ttaaaaatgt agaacctgggt ttgatgactc taattaaatt gtctgccaat 180
tactgaagag ctactacata ctagwttctg ggcttttagtt ctaaagccca cagcaacctc 240
atgaataaat attattagcc ccactgtata gatgagataa cagactagga gggagaagtt 300
anggaaactt gcttaatgcc tcctgttttag aaaatagctg aactggaatt cagccctgtc 360
ttccatttca ccctgcctgt gtctcacgca cagaacaccc ggggatccgc tggttcccaa 420
agcactgatg agaaccctaa tttgtcaana ttcttgggnt ccagtaaatt gtgggtccaga 480
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<210> 73

<211> 1071

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature
 <222> (1010)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (1048)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (1062)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (1066)
 <223> n equals a,t,g, or c

<400> 73
 ggcaggaggc tgccggggcg cgggctgctg cgggagaagg ggctccgagg agtccgccgc 60
 ggctcgctct gtcgccggcg cgggattggg gcgcgagggc catgggcgcg ctctcctaag 120
 gcggaggtcg cgggcgggag gggaggaggc ccgagagagg ctgctgcgaa ggccgcgggc 180
 ccgtgactgg gcgcgaggcg gccggcggcg gcggcggcac cagcaccacc atgtcgcgct 240
 cagtgtgca gcccagtcag cagaagctgg cggagaagct caccatcctc aacgaccggg 300
 gcgtcggcat gctcaccgc ctctacaaca tcaagaaggc atgtggagac cccaaggcaa 360
 aaccatccta tcttatcgac aaaaacctgg aatctgctgt gaaattcata gtcagaaaat 420
 tccctgctgt agaaaccgc aacaacaatc aacagcttgc acaactacag aaagaaaaat 480
 cagagattct gaaaaatctg gcattatatt acttcacatt tgtagatgtt atggaattta 540
 aggaccatgt ttgtgaattg ctgaatacta ttgacgtttg ccaagtcttc tttgatatta 600
 ctgtaaacctt tgattttaaca aagaactact tagatttaat tataacctat acaacactaa 660
 tgatactgct gtctcgaatt gaagaaagga aggcaatcat tggattatac aactatgccc 720
 atgaaatgac tcatggagca agtgacagag aatacccacg ccttggccag atgattgtgg 780
 attatgaaaa cccttttaaag aagatgatgg aagaatttgt accccatagc aagtctcttt 840
 cagatgcact aatttctctt caaatggtat atcctcgaag gaatctttca gctgaccagt 900
 ggagaaatgc ccagttattg agcctcatca gtgcacctag tacaatgctt aatccagcac 960
 agtccgacac tatgccttgt gaatacctct ctttgggatg caatgggaan attggattat 1020
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<210> 74
 <211> 640
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (93)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature

<222> (96)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (619)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (624)
 <223> n equals a,t,g, or c

<400> 74
 gttgcagtga gccgagatca caccactgca ctccagcccg ggtgacagag caagactccg 60
 tcataaatga ataaataaat aaataaataa tangtnacga tccattgtgg ctccctggaa 120
 acatccatgt tcacagctgg ggtctgggtca gtctgcatag tggagcacac tgctaggatg 180
 catccttagc aagtgaaaaa agtgaggctc agaactgttt gtagagtata gccttttata 240
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 tgttcattgg ctggggctcc tggacagaa gacagatttc caaagagaaa ggcacacmaa 480
 tttatgtaat ataagtttgc catgacmtgg gagcctttat aaggaatgac cccaaggaaw 540
 tggttaaacc tgagtgggtt tgtgtaaggt tttaatgagc aatgaaaagc tatggggacc 600
 tatgatagga ggatgtaanc taanccaatg acctggggga 640

<210> 75
 <211> 507
 <212> DNA
 <213> Homo sapiens

<400> 75
 ggagcttcaa catatgaatt ttcaggggta tcattcagtc caaagtactt aakatgattc 60
 ttttccggtt ccacatagac aatcacataa tctgtaaata atgactctta cttttccact 120
 ttagtcgtta gggtatacct atatatatat wwwmwgtgctt tactggacta atttcaacct 180
 ccagcacacc accaatgaat agcagtaata ccagcataat tgtctgcagt tctgctgaga 240
 tacgtgctct attttatttg cttggctgta ggtttttatt ttattttttg aagaggctaa 300
 tctcttacag gaaagggttc tttttatata cagtttttac atgatgaatg atttccagc 360
 atttcataat tcatgaggct gaattcctct tgaatttatt aaatgcttcc tgtgcatcct 420
 ctgtgatgat catgtttatt tactgctaga actcaagtac ctagaactgt tcctggccaa 480
 tgatggtatg taataaatac ttcaatg 507

<210> 76
 <211> 1390
 <212> DNA
 <213> Homo sapiens

<400> 76
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 cgctctaagt cctacttgaa caaacacatc cagaagggtgc atgtccgggc tctcgggggc 120
 cccctggggg acctggggcc tgcccttgcc tcacctttct ctctcagca gaacatgtct 180

43

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ctcctcgagt cctttggggt tcagattggt cagtcggcat ttgcgtcatc tttagtagat 240
cctgagggtt accagcagcc catggggcct gaagggaaat gaggcagctg ctgtgtcccc 300
acggaaacaa ccatctgggg actgctggga aatgctgtga atgcggaggg aagtgatgtt 360
tgggttctgt agctgagaga tttttattca tttttaactg ccccccaacc ccactccaac 420
tccttctcca ccaccattc tcccaatggt ctttagaaat agattttcat ctgatattct 480
gcagaaatat caatgagact tggatatgga caggggcaga aaacactaca taggcctcca 540
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gattgtttga agtctatgga agaaatagtt ttatgcaaaa ttttaaaaaa tgccagtctg 1200
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aaaaaaaaa 1390
```

<210> 77

<211> 782

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (29)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (34)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (738)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (748)

<223> n equals a,t,g, or c

<400> 77

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gggcacgagc tcgtgccgaa ttcggccang aggnacctga gcagtctaac tactccagtt 60
agacctaaagg gcacaaatgc agaattcatg accttgtagt tgtggcaggg tctaggaagt 120
cctctctccc caagtagaaa atattctctt gccattcctg aaattccaca ttcataataa 180
```

44

```

ggctgtgcaa tacatgcttc tcaataagaa aattaactgc atgtttactg tgtgctgac 240
acatcagatt tttatgttta aaaaaatctc attatggatt gagtccagcc cagctctaag 300
agaaaaagaa ggcccatatg ggagacttca stctcattat tattgccttt atccagcagt 360
gcttatgaag cccctaccc tgtcccatc cagaaacat aagactcagg cagttcttga 420
ttctggaggc ctgcctggta agataagata gtataatttg gaactgagaa cataccagaa 480
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attaatactt aatgagggtt aaacctgacc agtctttcta cagtgcagg ccacactgca 660
tgaatgggga gaaccaatga atccattgtc ctctgcctat tttcctgtgc acagtcacat 720
tcctctctta agaatctncc ccttccancc tttacattaa ccaagggaca ctgaatcttt 780
ca 782

```

<210> 78

<211> 278

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (8)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (27)

<223> n equals a,t,g, or c

<400> 78

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cttctcgntg cccgtgcaaa ggctccnctg cagaagacat cctytggcag cctgctcttc 60
tgetgctcct tttgctgctg tcccatgtgc tctgagaat gagaaccctg cctttgcaac 120
aaaccatgcc ccggtaaatg caaaaccaca tgctctgtgc cccgagagaa aacctctaac 180
cagcaaggaa aatgtattga tgcattcttc cattttggca cctgraagag agtcttggrg 240
aactgcagga gagggggaaa actggaaaaa aaaaaaag 278

```

<210> 79

<211> 828

<212> DNA

<213> Homo sapiens

<400> 79

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gccaatcaat gagcagtata gagaatttct ggaagggaga cacaagaagc tgtagaaaag 60
ggcggcttcc agggaagttc tagggagtct gggatgaatg agaaacttat cctaacaact 120
tttgggctct ctgaattttt tttagtatct gcaagtattg tacttgttca aatatgttta 180
aggetgcagg ctgtattcta aaactcctga aagtgagaac caggtttcac tcatatttcc 240
atcttttcaa cccctagatc agtgacttcc cagggaagta gtacctgcac ttgggggttga 300
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ggctgtgacc tagcccttcc tttctctttg ctctctgtgc aaatgagagt gttggcttga 420
acgatctcta aagcctggaa gaggagcaga tctctgtgc tcagcccca ctctgtgtca 480
gggaggcctg gcaaccacag tgttctttct cctgtttatt tgttcttgga tcttcctgaa 540
gccatttcac caccagcctt catcttctct gccagcccca tggagactca agctttttcc 600
agcctatgtc agggaaggag aaccagagac agcaacctcg ggtgtgaagg gagtgcagctc 660

```

<213> Homo sapiens

<400> 82

```

tggacagaaa attcaatcct ttattttttt ctctgtaaat gcacgggcta tgagatagca 60
acaaaaaatg catagttaat ggcatagac ttatttccaa aacataattg gaaaatagaa 120
wctgagccat tgccaaatgg taaagaaatg aaaagttttc acagtgacta ctgaatatac 180
caagagcttt tggcagtact gctggctttc tgggtgatta attaggtaaa cttggaatat 240
tcccagtaaa agtttgagaa tgcataaaat tataccattt tgaaaaatat aa 292

```

<210> 83

<211> 352

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (291)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (345)

<223> n equals a,t,g, or c

<400> 83

```

ggcagcagtk aaacttgctg ttttgttcct gtgtcttgct tttggttggt atttcagtaa 60
gttttttgga ttctcaaatt ttatctaaat ggataaacta ttaacataga acataaacc 120
caattctcca ttctattttt ctcttaggca tgaatcatatc aaaactcaat atagagcaat 180
gtttgtaatg aattgttcta ttaacaaaga ggaggttcta agatrtaag cctcagagga 240
acaggaagga aaaggcgggt ccataaggaa gatgaggtct taaccgggga ngatgctgct 300
tgaggagggc cagagacagt tgtgggagga aatcttttca ccccnttcat gt 352

```

<210> 84

<211> 404

<212> DNA

<213> Homo sapiens

<400> 84

```

cccccccct tttttttttt tttttttttt tttttttttt tgcgattgct ttaaagaaag 60
ctttatttac tacatacatc ctaagaatgt actgtaaatg gagcaagatc taaataaaaag 120
cttttcaaat ataaagcagc taaagttaac taaaccacta gcaatgtttg aaaacagaac 180
tctaaaactt tttttttaca tttatatagt ttgttcttaa cactaaaaaa aaaaaagttc 240
acatttcaag ttataaactt acctcagtag tgtacatgaa atgggtttga aacaatagga 300
acagataagt ccagatagg rggtcactg atacttaatt ggccatgtca ccaatgtttg 360
tttttaaggg rgtttggtgg ttgccatgtt tatcattttt tttt 404

```

<210> 85

<211> 1555

<212> DNA

<213> Homo sapiens

<400> 85

```

ggcacaggac agtctcatga ttataactgg tccttcaagt atacagggaa tataataaag 60
ggtgttataa acatgggttc ctacaactat cttggatttg cacggaatac tggatcatgt 120
caagaagcag ccgccaaagt ccttgaggag tatggagctg gagtgtgcag tactcggcag 180
gaaattggaa acctgggaca agcatgaaga actagaggag cttgtagcaa ggttcttagg 240
agtagaagct gctatggcgt atggcatggg atttgcaacg aattcaatga acattcctgc 300
tcttgttggc aaagggttgcc tgattctgag tgatgaactg aaccatgcat cactggttct 360
gggagccaga ctgtcaggag cmaccattag aatcttcaaa cacaacaata tgcaaagcct 420
agagaagcta ttgaaagatg ccattgttta tggtcagcct cggacacgaa ggccctggaa 480
gaaaattctc atccttgttg aaggaatata tagcatggag ggatctattg ttcgtcttcc 540
tgaagtgatt gccctcaaga agaaatacaa ggcatacttg tatctggatg aggctcacag 600
cattggcgcc ctgggcccga caggccgggg tgtggtggag tactttggcc tggatcccga 660
ggatgtggat gttatgatgg gaacgttcac aaagagtttt ggtgcttctg gaggatatat 720
tggaggcaag aaggagctga tagactacct gcgaacacat tctcatagtg cagtgtatgc 780
cacgtcattg tcacctcctg tagtggagca gatcatcacc tccatgaagt gcatcatggg 840
gcaggatggc accagccttg gtaaagagtg tgtacaacag ttagctgaaa acaccaggta 900
tttcaggaga cgcctgaaag agatgggctt catcatctat ggaaatgaag actctccagt 960
agtgcctttg atgctctaca tgcctgccaa aattggcgcc tttggacggg agatgctgaa 1020
gcggaacatc ggtgtcgttg tgggtggatt tcctgccacc ccaattattg agtccagagc 1080
caggttttgc ctgtcagcag ctcatacca aagaatactt gatactgctt taaaggagat 1140
agatgaagtt ggggacctat tgcagctgaa gtattcccgat catcggttg tacctctact 1200
ggacaggccc tttgacgaga cgacgtatga agaaacagaa gactgagcct ttttggtgct 1260
ccctcagagg aactctccct caccagagac racctgtggc ctttgtgagc cagttccagg 1320
aaccacactt ctgtggccat ctacagtgaa agacattgcc tcagctactg aagggtggcca 1380
cttccactct aaatgacatt ttgtaaatag taaaaaactg cttctaatec ttcctttgct 1440
aaatctcacc tttaaaaacg aagggtgactc actttgcttt ttcagtccat taaaaaaca 1500
ttttattttg caaccattct acttgtgaaa ccacgccgag ccctatgcag tctca 1555

```

<210> 86

<211> 455

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (430)

<223> n equals a,t,g, or c

<400> 86

```

ggcacgagcc agagccgact gcaaatacact gaactgagct ggcagctgct tagggggttg 60
catgatcaag gcgattttta taacctagaa gggcctggac tgtagaagca gattccagct 120
gaggcccagg cactgccttg ctgtggtgag cacggcggct ctgstcttcc ccgccgagct 180
ttctcatcag tgaagtgggg tagtgacagc atgcgagggc acggagctgt cagcaggctc 240
cagagaccat ggccataaag cactgacact gacacggccc cagcaagccc ttkgggaagg 300
gcagccacca cckttgctgc tgytgctact tactgttget gttgatttaa ggcaktacat 360
actcaggyt catagcttgt aaaamaaagg aaaaatgaaa agtcaccatc atcccagcaa 420
aatgtaagg n tcccctgctg cccagattgg aatgt 455

```

<210> 87

<211> 675

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (427)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (528)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (564)

<223> n equals a,t,g, or c

<400> 87

```

ggcacgaggt cgggctcgga ggaggatcca gagacggagt ctgggccgcc tgtggagcgc 60
tgcgggggtcc tcagtaagtg gacaaactac attcatgggt ggcaggatcg ttgggtagtt 120
ttgaaaaata atgctctgag ttactacaaa tctgaagatg aaacagagta tggctgcaga 180
ggatccatct gtcttagcaa ggctgtcatc acacctcacg attttkatga atgtcgattt 240
gatattagtg taaatgatag tgtttggtat ctctgtgctc aggatccaga tcatagacag 300
caatggatag atgccattga acagcacaag actgaatctg grtatggatc tgaatccagc 360
ttgcgtcgac atggctcaat ggtgtccctg gtgtctggag caagtggkta ctctgaaaca 420
tccaccnctt cattcaagaa aggccacagt ttacgtgaga agttggctga aatggaaaca 480
ttagagaca tcttatgtag acaagttgac acgctacaga agtacttnga tgcctgtgct 540
gatgctgtct ctaaggatga actncaaagg gataaagtgg tagaagatga tgaagatgac 600
tttctacaaa cgcgttctga tggtgacttc ttgcatagca ccaacgggaa taaagaaaag 660
ttatttccac atgtg                                     675

```

<210> 88

<211> 493

<212> DNA

<213> Homo sapiens

<400> 88

```

gtcgccctag gctgggactc tagtaggtct tccgctcagt tttggctgca gcgcccgcgt 60
agatcgcttc ggccgsgttc tacgcccggc tcaactatga gcckgtgcgc ccaggcgggc 120
gaagtggcgg ccacagtgcc aggtgccggc gtcgggaacg tggggctgcg gccgcccattg 180
gtgccccgtc agcgtccttc ttcccgcgcg cggtgccgaa ccccttcgtg cagcagacgc 240
agatcggtct cgcgaggcgg gtccagattg tcttcttgg gattatcttg cttccaattc 300
gtgtcttatt ggttgcggtta atttattact tgcattggcca ttgctgcatt tcaacagtat 360
gctgtcttga aaagctgacc caccacaata ctggttggag gaggtaagaa atattttgtc 420
caaaatatta ggacataata ttaaattaag atatactaaa tcaatataag aagagttcat 480
catagtttag tca                                     493

```

<210> 89

<211> 416

<212> DNA

<213> Homo sapiens

<400> 89

```

gtgggggatgg tgtcgcatag cagccgctgc cgctttggct tgctcgggac catttggtg 60
gacccagagt ccgctgtgaa ccgcatagg gatctgtcag ggcccgggc cgggtccagc 120
ttggtggttg cggtagtgag aggcctccgc tggttgccag gcttgggtcta gaggtggagc 180
acagtgaag aattcaagat gccacctawt ataaactgga aagaaataat gaaagttgac 240
ccagatgacc tgccccgtca agaagaactg gcagataatt tttgatttcc ttatccaagg 300
tggaagtaar tgagctaaaa agtgaaaagc aagaaaatgt gatacacctt ttcagaatta 360
ctcagtccac taatgaagat gaaagctcaa gaagtggagc tggctttgga agaagt 416

```

<210> 90

<211> 1467

<212> DNA

<213> Homo sapiens

<400> 90

```

ggcacgagtt catcttcac tctcagctt gctccaaatg gtgcaaaatg cattccagta 60
cgagaccgtg gcttcctggg gcagacaatt gagtttgctg aacagcggat ccctgtatta 120
aatgaatatt gtgtggtttg tgatgagcca catgtgtttc aaaatggccc tatgcttagg 180
cctaccgtat gtgaacggga gctgtgtgtg tttgcttttc aaaccctggg agtaatgaat 240
gaagctgctg atgaaatagc aactggagct cagggtggtag atctactagt atccatgtgt 300
aggtctgcgt tggaatctcc tagaaaagt gtgattttcg agccatatcc ttctgtggta 360
gatcctaatt atcctcagat gttggccttc aacccagga aaaagaacta tgatcgagta 420
atgaaagcac tggatagcat aacttctatc agagaaatga cacaagcacc atatctggaa 480
atcaagaagc aaatggataa acaggacccc cttgctcatc cettactgca atgggttata 540
tcaagtaata gatcacatat tgtgaaactg ccagttaaca ggcaattgaa gtttatgcat 600
actccacatc agttccttct tctcagcagt ccaccagcca aagaatccaa ttttagagct 660
gctaaaaaac tctttggaag cacttttgca tttcatggct cacacattga aaactggcac 720
tccatcctga ggaatgggtc ggttgttgct tctaatacac gattgcagct ccatggtgca 780
atgtatggaa gtggaatcta tcttagtcca atgtcaagca tatcatttgg ttactcaggg 840
atgaacaaga aacagaaggt gtcagccaag gacgagccag cttcaagcag taaaagcagc 900
aatacatcac agtcacagaa aaaaggacag caatcccaat tcttgcaaag ccgtaactta 960
aaatgcatag ccttatgtga agtgatcacc tcatctgacc tgcacaaaca tggagagata 1020
tgggttgctc ccaatactga ccatgtctgc acacgattct ttttcgtcta tgaagacggc 1080
caagtgggag atgcaaatat taatacacia gaaggaggca ttcacaaaga gatcctccga 1140
gtaattggta atcaaaactgc tactgggtta aggaccacca ttttaattaac atgattcgaa 1200
agccttcctc ggggttcaaag ctggattttg aactgaagaa gattataaaa ttatttattg 1260
ttattataaa caaaattaac cctttgaata ctgatttttt ttcttagtat ttctaagtat 1320
ctcattaaat acctaaaatg gtataagatt tatcaattgt agggttatgg aatctagtaa 1380
taaaatttca acagcactta aactgaagtt tgggttgctc atacaataaa cagattgaaa 1440
aaacaaaaaa aaaaaaaaaa aaaaaaa 1467

```

<210> 91

<211> 1793

<212> DNA

<213> Homo sapiens

<400> 91

```

ccacgcgtcc gatttgctcc tattgttcta tttttaaata aatatacaat cattgttttg 60
cattgaaatg catatttgta cattttattt gataatatta ttttgggaaa ttgtaatctg 120
ttgttttggt tgtttgttaa gggagcacg aagaagaatt tacaatgtg aataaaattg 180

```

50

```

ttaaagatta ccaatagttt cttttctgga cttgaaatag ttacgtttct aaatatgaga 240
aaaaataactt tgcctaaaat ttcagtataa tgaccagggtc ttctctccat tttagagaag 300
cagtccaatg tggaaacagat aagacggcag cgatccagtg aggtcaattc cccacagagg 360
aaagctatgc atacctaact taatggaagg taaactttct ttcaattaat gatgtcctcc 420
ttttctcaag gtgtccaaag acaggagggtg gtctgtaaaa ggttgatga caactccatt 480
gtccagaaca attactgtga tcctgacagt aagccacctg aaaatcaaag agcctgcaac 540
actgagccct gcccacctga gtggttcatt ggggattggt tggaaatgcag caagacttgt 600
gatggtggga tgcgcacaag ggcagtgtct tgcacagga agatcggacc ttctgaggag 660
gagacgctgg actacagtgg ttgtttaaca caccggcctg tcgaaaaaga gccctgcaac 720
aaccagtcac gtccaccaca gtgggtggct ttggactggt ctgagtgtac tccaaaatgt 780
ggtccaggat tcaagcatcg gattgttctg tgcaagagca gtgaccttc taagacattc 840
ccagctgcac aatgtccaga ggaaagcaaa cctcctgtcc gcacccgtg cagtttgggc 900
cgctgccctc ctctcgctg ggtcacagga gactggggcc agtgttctgc tcagtgtggc 960
cttgacagc accttggtg atgctggaag aggaggcag tcagtgtcac ttctgggatg 1020
tgccccagca ctgagaacaa aatgcaggca tccccgggg cagcatcaga gtgcctttct 1080
agagggagcc acgcacagaa tgtaacagga tgaaacagtt tcaagtaagc cttgaattga 1140
aacctgagta ggttaaaaca attctatttc atagcacatc acaatactgc tgctactctg 1200
tagccacccc catggctaca tgatgcccta ttctaaata ataacaatag cattgtcagt 1260
ggaggctggg ccaccatggc agacctcca aaagtagtga gctacataga ctacttaggg 1320
aaccacaggg aaactggtac cctacacctg ggagcagtat ctgccactgg gataaagtcc 1380
tactaaaaaa ggaacggtaa atgtacccta atgattaaac cccgtgagat acatatgatt 1440
tccaaatagt ccatttcatt aggaactttt ttgtttgaat gaatgtcaca taggtatcct 1500
cagtaacaca gaacgaaatt acctttgtat tattgtgatt agttgttgct tattatttta 1560
tactcagtaa taatgtggtc cactgttaat ttttttgct ttgtaaatta tattctaatt 1620
tattgccatg ttctctaaca cttgtcctac attcattctc ctgcttgtaa tgaatatgaa 1680
aaaatcattg taacacttga tggagtgaat ttccacgcca ggcacagaat ttttttgaca 1740
tagataatth agtaaaataa aaattcagct tataataaaa aaaaaaaaaa aaa 1793

```

<210> 92

<211> 538

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (24)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (53)

<223> n equals a,t,g, or c

<400> 92

```

gcccaaggat tccggcacga gganttkttg ttggttgggg gccttttggc sgntgacgga 60
gactgccagc gtgtggtcac catgttcttc tccgggtct tctttgccaa gagcaagtca 120
aaaaacattc tggtgagaat ggtgagcgaa gctgggacag gtttctgctt caacaccaag 180
agaaaccgac tgcgggaaaa actgactctt ttgcattatg atccagttgt gaaacaaaga 240
gtcctcttcg tggaaaagaa aaaaatacgc tccctttaa cgggtggattg aaaatgactt 300
tgatttataa agagaagact gagggcgggg atactgattc agaaatcctg tagcgtgtaa 360
taaaagaaga ggaaatggca tggaaatcact gcctcctgtg atttgaaggc cattgtgaag 420

```


51

gaaaacaatg cagtgaaaga aagttcttca tattaggaca gatattcattg catcacattt 480
atttatcttt ctgggtatth ttatagccct taataaaaaa tattaaaatw gwaaaaaa 538

<210> 93
<211> 483
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (444)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (483)
<223> n equals a,t,g, or c

<400> 93
gggaatctat cataactagt ctagagattt ctcaccaagg gaaattttcc ttatctaaaa 60
gaggaacttc aggtctcaac cctgccagtc acaccaatt aatgtccttc acaaaaataa 120
acagcatatg ttccctttca atttgagttc agtgagctca cagcaaaatt taccttttaa 180
ttttcttcag caaatccaag acgaatatac aaaggatgag attagataaa gatttcagtt 240
tcccgtatgc caccgctggc cgccaatttt ccaaaaaagc ctggctcctc ttttcctggt 300
cttccatcca agcccccaaa gatctctaac cagaawtaaa caggaagact cagtgattta 360
caaaagacat tttagtttta cacgtacaga aaattctacc cagcattaca gaaattctta 420
gacttcttaa aattcccggg tttnccttgg tatttaacat ttggataagg gagccatggg 480
ttn 483

<210> 94
<211> 719
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (619)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (633)
<223> n equals a,t,g, or c

<220>
<221> misc feature

<222> (643)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (646)

<223> n equals a,t,g, or c

<400> 94

```
ngggaattgc tgagatgaca gtgtcccaca cagcttcaaa taaaatccat ggaaagatgt 60
tgcatttgtg gaataagtgc ttacttgaaa agcatgttct tcttttattt tcttactgtt 120
aagaattttt atttgttagga tgtttgtttt aatttaattt ttttaaggga tgggggccat 180
catgtggaaa ccagaaaatg gggaaagtgt gaactatcca gacaaagatt catttttgtt 240
ctatatttgt ttttaattgg cctcatttca aatgtattaa acagttccat acctggattg 300
ggtgtttgta atggttacca aaaaacaaac aaaaaaagaa agaaaaagga aaaaaaaaaa 360
gaaaataatt gtgacatgct tttatcacta ctttatTTTT caaataacat gtaaataattg 420
taatccattg gattttgttt tgctaacctg ttaataaaaa tatgggacca ttatcctttt 480
aacaaggcta gaatgtcatt tttttctttt tcaacatata cctgatattt tgtggccgca 540
cattttggrrt gcattattat aattckgttg actgtaatga catagaatta cacattttkt 600
gktggttaat tatacagang acattttttt canagcttga ganaanaaaa taaatagcaa 660
aatgataacc tattgactcc agtaatcagt gtttcccaat acttcataag aaataggga 719
```

<210> 95

<211> 613

<212> DNA

<213> Homo sapiens

<400> 95

```
tattcagcta ctatacagaa aaaggatgaa caaattaatt tatttctaatt tgagccagtt 60
agacataatg catataacgt gatatttggg tcatgaaaga gttgttttca tgtggttatt 120
gtagggagta tatataattg tggaaggggt atgggaagag ttgtgtatag ttagttgtta 180
tctctacaag tttgaaagtt ttcccatcaa acattatcaa tataccaatg ttttaaaaaat 240
tgagtgaggg ttattatttg tatttgatga aagaaaatcc aaataaagcc cacctagaaa 300
tagatatttt attatatatg tgctatagat atacctatat agtacaaata gacatgtgtg 360
atgcatatat acaatgttat atatgtgtat atgtctgtat acacactgag tctgtaatat 420
gtatacacta aatttggtgky amgctaacak cttcaggggc tgcactgtga actcccckgg 480
agataagtaa gtccacttta gaataaagag ttcttttgag acttcagtta ctaacgtgct 540
ttaagaggta tctactttat aactgaattc tatgtcgttc atacgtagag ttacagtaag 600
ggtctagtat gtc 613
```

<210> 96

<211> 816

<212> DNA

<213> Homo sapiens

<400> 96

```
gggaaaggag ggtcaggcga gtccacgagg aggttcgagt gaagatcaaa gacttgaatg 60
aacacattgt ttgctgccta tgcgccggct acttcgtgga tgccaccacc atcacagagt 120
gtcttcatac tttctgcaag agttgtattg tgaagtacct ccaaactagc aagtactgcc 180
ccatgtgcaa cattaagatc cacgagacac agccactgct caacctcaaa ctggaccggg 240
tcatgcagga catcgtgtat aagctgggtc ctggcttgca agacagtga gagaaacgga 300
```

53

```

ttcgggaatt ctaccagtcc cgaggtttgg accgggtcac ccagcccact ggggaagagc 360
cagcactgag caacctcggc ctcccccttca gcagctttga ccactctaaa gcccactact 420
atcgctatga tgagcagttg aacctgtgcc tggagcggct gagttctggc aaagacaaga 480
ataaaagcgt cctgcagaac aagtatgtcc gatgttctgt tagagctgag gtacgccatc 540
tccggagggt cctgtgtcac cgcttgatgc taaaccctca gcatgtgcag ctcccttttg 600
acaatgaagt tctccctgat cacatgacaa tgaagcagat atggctctcc cgctgggttcg 660
gcaagccatc ccctttgctt ttacaataca gtgtgaaaga gaagaggagg ttagccaagc 720
ccccaccca tcccactccc cttccctcmc cagatattta tgtgaaatga actgcagctt 780
tattttttga aataaaaact tttaaaaagc aaaaaa 816

```

```

<210> 97
<211> 577
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc feature
<222> (38)
<223> n equals a,t,g, or c

```

```

<220>
<221> misc feature
<222> (575)
<223> n equals a,t,g, or c

```

```

<400> 97
cagaagccaa aaaggtctta aaattggaaa tagatgtntt tattgtactt cagccaacag 60
caagccaggg gaaggaacat acataaatat gacagggtcat atatgaaatt tggctctcct 120
cctatcaaag tagcctagga gcttggagga agcctaatta actaaaacag gaaaaaagca 180
tactcatctg atgtaaaaac tcatcagctg taaattacca acattaaacc agaagtcatt 240
accagttaaa atgtgtgggt ttcattcttat tcttaaatag gagaggtggr cagtagtgta 300
agtaacattg ctttaaagrc ataaagcttk tcctggtaaa catgggtctaa atgagaaatg 360
cctccatctt ttcaggtaga accagatttc aggcataget cagctacatc tgtattttgaa 420
atacaataaa aatattttctt atgtctctgt attctctttt aaaaagaact gctgactggc 480
tcctgtctct tcagtaacac tgattttttt ttaaagaagt gatatgttgg actctgttgg 540
agaagaatga gcactagtat tcagccacaa gtgcnat 577

```

```

<210> 98
<211> 484
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc feature
<222> (456)
<223> n equals a,t,g, or c

```

```

<220>
<221> misc feature
<222> (476)
<223> n equals a,t,g, or c

```

```

<400> 98
cttgagctcc acttgctgaa gaagttgtgt catttctctg gaagaatttc caaaattctg 60
gatttttttt tttttttgga gtatttcacg agctgaaaag tgattctyac tttgagtttt 120
cttcctatat ttgtatagtg agttcctttt tccttcctct ttatccctcc tgttttactt 180
tatacctctc tattccttgc tcaaattatt gcaaaagcct ctatagaaag tcctctgtga 240
tctgactcct gcagactcct ccagattttt ctgccccagg cctttactga gctcaggact 300
ccagctaaat caaratackc atgttctcac ccagagtgaac aaaatcctgc agatagggtt 360
aagacctagt gggmtcagag cagtagctac tgggaagtta aaaggaaggg gttagaaaat 420
gaatgggaca aaggcacact tctgatggag atgaancact tgaaagtga tggtgncttt 480
ggag                                     484

```

```

<210> 99
<211> 441
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc feature
<222> (328)
<223> n equals a,t,g, or c

```

```

<220>
<221> misc feature
<222> (331)
<223> n equals a,t,g, or c

```

```

<220>
<221> misc feature
<222> (332)
<223> n equals a,t,g, or c

```

```

<400> 99
aattcggcac agggaaaaag gctgagcgga gagccgtgct gcctggcccc tcctcaccgc 60
ccttccccgc acctcttggc tgtaccggga gcctctgaag caccggaaat gaagggtttt 120
ccaggccttg ctcttcaacts catccttcag gggaactttg aagccatgga gacatctggc 180
tttgagacca tggcgattcc cctgccactc tccttgctgg gataaagcca gggcgtggca 240
tcctgggatg atgttccttg ctgctgagtg tgcacacaac ctgagctcat cctgtgtacg 300
tcagctacac atgctcgcat ctaatttncc nnaacaacct agccagtact attgcttctc 360
ctcctcttac agatggggag atgatgacat atagagggtta acttatcaga gaccacacaa 420
aaaaaaaaaa aaaaaactcg a                                     441

```

```

<210> 100
<211> 524
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc feature
<222> (510)
<223> n equals a,t,g, or c

```

<400> 100

```
aaagaaaacg aaaaagaaag cccaaggcaa agaaggggga aggaaaacaa acttcgccac 60
tctytcttct ccttcctaac cctttgtyta gagcaccaca ccgctcacia actctttcca 120
aatgctcagt tggctcccaa agttggagcc tggcatgggc akggagccca caaaactcta 180
accaaactgg akgtctggcat gggagaartg cttctgggtc actcttccta ccctctccct 240
cctaaccctc tccttgccctg acagggagcc cctgtggcct ggactctagg ggatgccgcc 300
accagaaacc cctctgccaa tcctamctt gcaccctggg aaytgagta acttattctc 360
aaaggcttta aacacagaga tcctctcagc ggccgtgggc ctgccccttg tcctarccct 420
tgccacgttg agggtcacac ctccaaggga caggcactgc cccaccaacg gcaaatacaa 480
aattctttca aaaaaaaaaa actgaaaacn caacccaaaa aagc 524
```

<210> 101

<211> 614

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (355)

<223> n equals a,t,g, or c

<400> 101

```
ggagaagggt tctctctcat ctctctctcc agcaaccttg gccatggacc agccggctgg 60
cctgcagggtg gactacgtct tccgggggtgt ggagcatgcc gtgcgggtga tggtttctgg 120
gcagggtctg gagctggarg tggaggaccg gatgacggct gaccagtggc ggggcgagtt 180
cgatgctggc ttcatggaag atttgactca caagacaggg aacttcaaac agttcaacat 240
cttctgtcat atgctggagt cagccctcac tcagagtagt gagtcaagta ccctggacct 300
gctgacctac acagacctgg agtcctctgc gaaccgaaga tggggggccg ccagntcctt 360
ggccccccag tcggccccagc tcaactccaa gcgtacctg atctctcatc actccgtgga 420
gtttgacagg attcaactacc cgctgcccct cccgtaccag ggcaagccag accccgtggt 480
tctgcagggc atcatccggt cactgaagga ggaactgggc cgcctgcccc gtccctgccc 540
tgcccccgtc cctcctgctg cccctggggg tctcaggtgt gtgaggccct gacctgccc 600
tctccccagg cagt 614
```

<210> 102

<211> 544

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (5)

<223> n equals a,t,g, or c

<220>

<221> misc feature
 <222> (6)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (10)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (12)
 <223> n equals a,t,g, or c

<400> 102
 cnaanntgan anaaccctca ctaaagggaa caaaagctgg agctccaccg cgggtggcggc 60
 cgctctagaa ctagtggatc ccccgggctg caggaattcg gcacgagaga aaaattatatt 120
 gtatataact ttaaaaggag tagaagggtt ttttgcagag ttattacgtt tgaagtatac 180
 tttatttctt gaaaaaatta cagatttttt gtaaataatg atgtaattca actctcaaaa 240
 tatttctctac tgtttcttta ttccagttgt attcacatgt gaaagcatgt gatcagttat 300
 tgctgcatta aaaacatgag tcttttttat taggtggcca ttatttatga tcttttctat 360
 gaaagagtaa ggacattaaa atgtaagatg catgatgaaa aattaagtga agaggctctt 420
 tatggttaat ttatattgaa taatgcatta ggtaggtgtt cagagtaata ttttgcgttg 480
 tgagaacatt ttttaatttta tttaaaatta aatgaaaata aattagtata ttattgtact 540
 aatt 544

<210> 103
 <211> 1887
 <212> DNA
 <213> Homo sapiens

<400> 103
 ggcacgagag gaaggaactg gtttcgggga gccctgggag gggcggtgt ggggaggaag 60
 gtgacgtgca ggggaccaga ggctctgcac tgctcctagg acagctcatc tgtaatcaga 120
 aaaaaataa ataaaatata gaacgctgac tcctccgtga gacagatcgg ggaccttagc 180
 actttaatcc ctcccttctg agcgctcggg gtgcactttt agactatagc tgtttcattg 240
 acgtgtcact ctccatccag tgtccttgat gtggctttta gagacttagc agaaaattcg 300
 acacaagcag gaacttgatt ttttaagaaa aaatattaca ttttgaggac attttgacaa 360
 gtaggggaag agagggcttc tgttggtttg ttttgtttg ttaactaaac ctgaagtatt 420
 aattccacaa agacactgtc cctcaggacc actcaggtag agctctgcca gggacagagt 480
 ctgctagtgg gaggtctcag gtggggcggt gtgttctgtg ccatgaggca gcgacaggtc 540
 cagatggatg tcgtcaccac cttcctcagc tctcatcacc tggctgtacg ccaggccac 600
 ctcttccag caagggacgc caaagaactg cagtttttat tctgagtctt aatttaactt 660
 ttcacatctt tttcctatatt tgragaattt tttgtaatta aaagcaatta ttttaaaatg 720
 tgcaagccag tatctcaciaa ggcattggatt tctgtggaat ttatttttat tcaaataacc 780
 atatttatct ccaggctgtg gaatcgccac tttctttgtg aagacagtgt ctctccttgt 840
 aatctcacac aggtacactg aggaggggac ggctccgtct tcacattgtg cacagatctg 900
 aggatgggat tagcgastgt gggagactgc acatccggac ctgcccattg ctcaaaacaa 960
 acacatgtac agtggctctt tttccttctc aaacacttta cccagaagc aggtgggtctg 1020
 cccaggcat aaagaaggaa aattggccat ctttccacc tctaaattct gtaaaattat 1080
 agacttgctc aaaagattcc tttttatcat cccacgctg tgtaagtga aagggcattg 1140

```

tggtccgtgt gtgtccagtt tacagcgtct ctgcccccta gcgtgttttg tgacaatctc 1200
cctgggtgag gagtgggtgc acccagcccc gaggccagtg gttgctcggg gccttccgtg 1260
tgagttctag tgttcacttg atgccgggga atagaattag agaaaactct gacctgccgg 1320
gttccagggg ctgktggagg tggatggcag gtccgactcg accatgactt agttgtaagg 1380
gtgtgtcggc ttttycagtc tcatgtgaaa atcctcctgt ctctggcagc actgtctgca 1440
ctttcttggt tactgtttga agggacgagt accaagccac aagaacactt cttttggcca 1500
cagcataagc tgatggtatg taaggaaccg atgggccatt aaacatgaac tgaacggtta 1560
aaagcacagt ctatggaacg ctaatggagt cagcccctaa agctgtttgc ttttccaggc 1620
tttggtttac atgcttttaa tttgatttta gaatctggac actttctatg aatgtaattc 1680
ggctgagaaa catgttgctg agatgcaatc ctcatgttgc tctgtatgta aatctgtgta 1740
tacaccacac gttacaactg catgagcttc ctctcgcaca agaccagctg gaactgagca 1800
tgagacgctg tcaaatacag acaaaggatt tgagatgttc tcaataaaaa gaaaatgttt 1860
cactaaaaaa aaaaaaaaaa aactcga 1887

```

<210> 104

<211> 253

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (226)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (228)

<223> n equals a,t,g, or c

<400> 104

```

agattttgaa cttaaattat attctatatg tgtatcttcc taggcaaaag ctgtaatttc 60
cagagagacc attaggaaca ggtagtatct attttyctcc attatttatt tctagaaact 120
cataaaatgg attgtatttt tctataagaa caaaatatta attaaggat agatgactga 180
ccaagggstt aatcaaataa aatgactaac agcatctatc cataangnca cacaagcctt 240
atgttctcat ctt 253

```

<210> 105

<211> 705

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (671)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (688)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (698)

<223> n equals a,t,g, or c

<400> 105

```

cccaatctct agctagtgtt gcttatcaaa taaatgcatt ggccaacaat gtactccagt 60
tgctggatat ccaagcctct cagcttcgga gaatggagtc ttccatcaat catatctcac 120
agactgtgga tattcataag gagaaagtgg cacgaagaga gattggtatt ttgacaacaa 180
ataagaatac atcaagaact cacaaaataa tagcacctgc gaatatggag cgccctgtaa 240
gtatatctcg aaacctatcg attacacagt tctggatgat gtgggccatg gtgtcaagtg 300
gctaaaagcc aagcatggaa ataaccagcc tgcaagaact ggcacactgt cgagaacaaa 360
tcctcctact cagaaaccgc caagtccctc catgtcaggc cggggaacac tgggacggaa 420
tactccttat aaaaccctgg aacctgttaa accccaaca gttcctaata actatatgac 480
cagtcctgct aggcttggaa gtcagcatag tccaggcagg acagcatctt taaatcagag 540
accaaggaca cacagtggaa gtagtggagg aagtgggaag ttcgaggaaa acagtggtag 600
cagtagtwtt ggcwttcccw ttgctgtgcc tacaccttcg gcaccayta ttttgaaacc 660
atttgttgat ngttccaatt tccaccgnca ccactttnc ccaaa 705

```

<210> 106

<211> 920

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (920)

<223> n equals a,t,g, or c

<400> 106

```

gctagaagtg gattggagcc tctttgatgg atttgcagat gggttaggag tggctgaagc 60
catttcctat gtggaccctc agttcctcac ctacatggca cttgaagaac gcctggccca 120
ggcaatggaa actgcccttg cgcacttggga gtctctcgca gtggatgtag aggtggccaa 180
tccaccagca agcaaggaga gcattgacgc tcttcccgag atcctgggtca ctgaagatca 240
tggcgcagtt ggtcaggaga tgtgctgccc catctgctgt agcgaatatg tgaaggggga 300
ggtggcaact gagctgccgt gccaccacta tttccacaag ccgtgtgtgt ccatctggct 360
tcagaagtca ggcacctgcc ccgtgtgccg ctgcatgttc cctccccac tctaaagacc 420
aaggccgttt actcctggtc tgattatttt ccccatctga aatccacaat actgcaggag 480
ccctcttgaa attaacaatg gaaataaaac caatcagtca gttagcctaa acctattgat 540
tcctcgtgat tttttccaat gtgaaaacag ttgtgtatga ttgcattaaa aatcatatca 600
tcttttagag gttagaaaag ggaaaactaa actttctaaa tgctacttga gattgcagta 660
agaagatacg ttttctaacc tgaaagttaa atcgcatttg ttttcttcag tagaatggga 720
atgtgttgct gttacttgta atgtcaagtt tatctgttaa atatgtccaa aaggcaaaat 780
catttttggt gcattgtatg ggtcgatgtt cctgtaattg cagtgccgta aaagcttatt 840
aaagtgttc ttttggtttt aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 900
accccggggg ggggcccggg 920

```

<210> 107

<211> 466

<212> DNA

<213> Homo sapiens

<220>
 <221> misc feature
 <222> (1)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (7)
 <223> n equals a,t,g, or c

<400> 107
 ngggccntac tcggggcgctc ccagargggag ccacctctca gtgcctcamc tccccctgcc 60
 tcccagcctc cgcagatgag gttcctgccc ctctctctc gtaaccaaaa ccctcactgc 120
 tcccaggacg gtcttattta taaaccagat acatgttctt agtctggtcc cagaccaagg 180
 agctgggcag acggcccttt ctaatcctac atgttgagct tatgtaaaaa atgttgtttc 240
 ctctgtttt tgggttccttt cttaccacaca aaccattact acttgaaaact taaaaaactc 300
 gccaaagtga aaggctaaag agaagcagtt tgacggacct tgtgatttgt actgtttgct 360
 gcggagctat ttaaagattt tggaataaat atacaaaact acggttgtga aataaaaact 420
 taaattgtat attttgaaaa ataaaacact gaaaagaaac aaaaaa 466

<210> 108
 <211> 323
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (111)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (113)
 <223> n equals a,t,g, or c

<400> 108
 actatTTTTT tATTTTATAA atCTTTGtag aaataagcaa tgaaatacta ctttcatctt 60
 ttgaaatggg atTTTtcaag gcagtgtcct tttggcatta aggtaggggg ncngttaata 120
 ttctctctgc cttgTTTcca cgtggaatca atattaaagt catggacatt ttaaaatctc 180
 aatttaattt cttcttattt actatgcagt atagccgtgg aacaagtaat gtagatttag 240
 ttttctcatc ttcaaatgcc ctgatcacc tacctcacag ggttggtgtg gggrrwaata 300
 aaactttatg gragcaaaaa aaa 323

<210> 109
 <211> 448
 <212> DNA
 <213> Homo sapiens

<400> 109
 ttttttcaca gcatattaga aatgtttatt aagaataatg gcatgaactg cttttaacaa 60

60

```

tttagaaaaag acccattccc cccgcccsc cccgccccca gatccagggc acttcctcta 120
agtaaaayaca aatattttctg tagtgaactg tatgcatatt cccactgagt aaagggtata 180
agaagcctca ggtcaggtct taccaccaa cttgaaaaca cttggaatgc agctgggcag 240
ggacttgagc aggtttttgtc ttgataagca ggtaagaatg gcagaacact ggcttattgt 300
caaccaatgt ttttttatat acctgaagta ttcacagcaa cttattttta gaagcttttt 360
aaaagttcta cacctccacc cccacaactc cccaatccag aacatggaac aagggtgtgg 420
agccgtttga tggacttggg tctgttcg 448

```

<210> 110

<211> 849

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (32)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (33)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (39)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (841)

<223> n equals a,t,g, or c

<400> 110

```

ggtgactccg tctcaaaaaa aaaaaagaag gnngtaccna cagtatacgt gtgggcactt 60
gtgcttgagc ctgtattaaa ggaatcaggc caggcacagt ggctcacgcc tgtaatctca 120
gcacattggg aggctgaggt gggcggatca cctgagggtca ggagttcaag accagcctgg 180
ccaacatggt gaaaccccat ctctactaaa aatacaaaaa ttagctaggc ggggtagtgc 240
atgcctgtaa tcccagctac tcaggaggct gaggcggag aatcgcttga gcccgagagg 300
tggagactgc agtaagccaa gatcatgcca ctgcactcca gcctgggcaa cacagggaga 360
ctccatctca aaaaaaaaaa aaaaaaaaaa aagacattca acttgaggct cctgttagtt 420
aagctatctt ctttcaactg aagcagggtt gagaggccta ggccagaatt taaattcctt 480
ttatgaatag atttcccttt ctctctgacc ccaaggctcag aggagactat atattccatg 540
gctgcctcta agactaggaa taggaatatc tgaaaacagc atttctaagg gtggtaacca 600
caggctcgatt ttaatacagag tcctttttct thtagaggta agtaaaatct tcctgacaag 660
gtagtcctct tttcacggca cagacaatgg gctttctgtt tatgaggggt gagaagtgat 720
gtttgttact atgttctcca gcaagtaaac attcctctgc tcacctcca acaagactaa 780
cagtcttttt agaagtaaat atattcaaga caaacgagaa aatcctggct acccaagtcg 840
ngtatatac 849

```

<210> 111

61

<211> 876
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (871)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (876)
<223> n equals a,t,g, or c

<400> 111
aaaaaaaaatt tacaaaaaaaa caamcacama aaaawtatct ttttttaggcc agagttttct 60
acaggtatta atgaatatct ttcttaatcc ttataagttt tatgtgttta atatttctta 120
ataccggttag cattaattta tacttttgta gcaacacaat atttttataa acagccggtg 180
cttggctcaa gtcttcacga ggggttttagg cagggccatc ttggggaccc tgtgtaccat 240
gtactgtatt taaaaaaaaaaa aaaagttacc tattgtcaca cttgctgtgt taattaacaa 300
aagatgttgt gtgcggtctc ctgtatcggt gtggatccaa cagctctcca gggagtcaca 360
ttgcatgggg gttgagttga cggttcttgt gatatgtaaa ccccgagac caaacttgag 420
ggtttattta gggttttctg tttgtccttt gggtttttgt ttcactttgt tttggtgccg 480
tttctccatt tacagccaaa tcagtttcat gatgttcaaa acatttactg atgtcaaatg 540
gaggaaagga acagaaaaaa agatttttac aaagtaataa aattttaaac tgagctgttt 600
aatgttgctg tttttacctg tctgttcttg tccaaaagtg gaacattccc agggagaaga 660
ggaaggttcc actcggttct ttaagtcgcc aaaagcccca gcccggtt cagtacctcc 720
cctgcccccc gaattcttgc agcactattt cccagttggt tgatgccaag gcaaaaagat 780
aacttttaac agttagagag gatcagttgc ttaaagtatt tcatgtcagt gttgtattta 840
tggttttaca ataaaaacaac ctttaggaaa naaaan 876

<210> 112
<211> 382
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (100)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (105)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (341)
<223> n equals a,t,g, or c

<400> 112

```
gcctcccagg ttcattgccat tctcctgcct cagcctcccg agtagctggg actacaggca 60
cctgccacca caccgggcta cttttttata ttttttagtan agacnggttt catcatgtta 120
gccaggatgg tcttgatctc ctgacctcat gatccgcca ccttggcctc ccaaagtgt 180
gggattatag gcatgagcca ccgtgcccg ctattttcag ttcttatgct gtgaaccact 240
ttgccttgta gctttttcta tctttccaaa atcctcactc tgttcattgt ttgtctcagg 300
ggaaaatctt cccccaccga gcttgtaaaa aaactttaat nattgggtgg aggataattt 360
aggatgggta tttattggag gt 382
```

<210> 113

<211> 1070

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (334)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (882)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (961)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1018)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1070)

<223> n equals a,t,g, or c

<400> 113

```
ggcagcaggg ccgactggac tttgtgagct ccagctgcta cagttgactg agttcaggct 60
ccatgtagct gggatatact acatgggttac cctcaccctc tatggagctt ccaaagaga 120
ccctccctca aagcacagcc ccttctctga gtgcaaataa tggccatcag aggtcagtc 180
caggtgttag gcaggcatct atgaagctgg ggatgatagc actgacttca gtgcttggac 240
gagaaccagg agagagtgtg tagaaaaagc acagccagcc tcccataaaa ggacagaytc 300
ctgtgacaac cttgtcactc tgttctctcc tgantactct ggggaggtgg aggccagtgg 360
gcagttctaa agctcagcag gtttggagcc attgggtgtg gactcctctc ccagtgttcc 420
tcttgggtgt tcacagatgt tattgaaatg cacactggga accctgcaca ggtaaaacta 480
aggyttttatt ggcgtgattg ccaaaggtea cacagggtgg tttggyagag ctgggattag 540
aagcccagcc tgytctytc cagtagtaat ggagtcctgg gaggtttact aggcttttagc 600
ctcaatctgt ggcggcaggg tccacagccc tggggagtga cacagtcatg gtcccatga 660
```

63

```

ttggccagga cctgktgtga gagacacagg agacaagacc ctgctcttcc aggccagaag 720
ggaggggagc cccagagctg ggcagtggca tgccccacag cctggccacc tgcttcgggt 780
acgcaccatg cagcagctgc acctggctgc ctcgggaaaa ctctgacctc tctgggaagt 840
ggagccagtg gctctgtggg cgtcctttcc tgcagcctgg anagcaaagc ggctttccct 900
gggactgtgt ggctcctgtc ccaactggcc tccccattcc acattcccat tgctggacca 960
ncaccaggac tgggcacagg gcttcctttt gctgattcat tcccccccta actcatcnaa 1020
attgaacccc atctgattcc cacatgctgg ccctgaaacg gtacaaaggn 1070

```

<210> 114
 <211> 371
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (360)
 <223> n equals a,t,g, or c

```

<400> 114
gtctattaga aaacggctct aagagattct ttggtgtttg gcactttaag gtcacgtttg 60
ggcagaagtt tagcattaat agttgttctg aaacgtgttt tatcaggttt agagcccatg 120
ttgagtcttc ttttcattgg ttttcataat attttaaaac tatttgttta gcgatggttt 180
tgttcgttta agtaaagggt aatcttgatg atatacataa taatctttct aaaattgtat 240
gctgaccata cttgctgtca gaataatgct aggcatatgc tttttgctaa atatgtatgt 300
acagartatt tggaagttaa gaattgatta gactagttaa ttttaaggag atttgaagtn 360
gggtgggggg g 371

```

<210> 115
 <211> 581
 <212> DNA
 <213> Homo sapiens

```

<400> 115
tttttttttt tttttttttt ttttyttgagt attccagcat tattttatttg atcagagtaa 60
aatacacttc ccatcactac aaactgagca caactacagt tgtctacaca ttcatttttt 120
tgacgtgcca acatttttgc ttctacatga aacatttggt ttaaacaata tcttaagaat 180
tctctatttt gtttcccatc ttcctcctg ttctctccca tcttccaaag atgttttata 240
ttaactgcta tgagatttat ttgccggcca cgtataacgg aggacagcag ggaacaacac 300
aagatttacc atgcctaggg gatgaatggc aaacccaact ttggctaata tcattgagaa 360
caacttgga agcgtgasag gaggatatct catggaagtg ggcagtgaac ctacatttcc 420
atztatcaga agcaaactg ggaagggttac atacatgatg aagtattgga agttaagac 480
ttaagacaca aaatactaa tttaaaagra cmtgcmact grgtatcaac ttgctatgta 540
gkgtagatgt aaatgaccca aatattcacc tctagcatcc g 581

```

<210> 116
 <211> 705
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature

64

<222> (681)

<223> n equals a,t,g, or c

<400> 116

```

atcggacggg cttaacatga aagcctatag gtcattcttg ctctgggatac tacaggcagg 60
gtaggcacag gtgcagccta agaaggggaac ctgcttcctc tcccttccaa agacagtgac 120
agctgactga gggcaaagag caggcaccac tcagaacgtg gtgagtacag ctcagctcag 180
cactcagtca gtggtaactt gtgcccagcc ctgtgctagg cgctgacatt aacaggagca 240
accagggccc aattcctggc cttggagctc aaatctttcc tttgattttt gtccttgatc 300
atcaaggccc cagtggcaac catgtggtaa gtggccaacc aagccctacc cagggtcacc 360
caacacactc tgccttgagc ctctcctcag ggtctattcc ttgctgggat tatgtggccg 420
tagcatgtta cagttcaaac atgtctccac taccctgtta agagcagcct gggaacgtac 480
aggccatcaa gactatttat ttaaatacaa aaaaagggga aaacacacac acggaaaaaa 540
aattgtaagc actttttttg taaaaccaat gtctgttttg ttacatacct ttcattgtcg 600
gctttgtaaa tgtcttattt gtgtaataaa gttaatgcaa gtaaaaaaaa aaaaaaagat 660
gggcgaagtt atcccttggt nggtaattag tttgctgctg gttta 705

```

<210> 117

<211> 1196

<212> DNA

<213> Homo sapiens

<400> 117

```

gcgaccgcct cgcgtaccgc gcttgccggtc cagagcgcag cagccccggg gtggcgatgg 60
ggtcgcgcgc aggcagcggg ggttctgcgg gcgactggag gttggcagtg ggccggagaa 120
agaggaaggc aggcgcggct gggcctcggc ctctggcgcc gcggtaccct ttgtctcggc 180
agcctgacgg ccccgccggg ctctccggag aggggaacgg gcggcgaggg tggcggttcc 240
tgggcgcgcc gtgctgcggg gccgagaggc gctcgggtcg cggcgggatc ggccggacca 300
gacaggggta atggaagagc ctggccagtc ccgcgcgggg ccccgccagc gacagccttg 360
gccgcgggga ctggagtcct gagggggaga agcctgccgt tctgaaggct cgggacttct 420
gccccaaaga cttcgccgcc gagaactgcg ggtgcactgc ctcagggaag aagttgagaa 480
ttttgccagg tcatctctgc cagggcacag ttcattactg tgtgtttagt gtgtttcggg 540
gaagctctcc aagtgtgttg aatcagcgtg cctagcctca aggggtgcac gtgaaaactg 600
aaaccaaagg aatgatacag gcctgctttg tgtgtgtctt cccactttaa gcttggtttc 660
agtacaaata ctcttgcttt aaacctgatt ggactgtggc gagcggacat ctgttcaaag 720
gaggggcccga gaccacagta cttctgaagg gggcttgata atgtggaaac attttaagtt 780
ttctctccgg actgttttgc tctctcaatt caggcaagtt actgaagtac gttttttatc 840
tagaaaaagg tttgatgtag tctgtaaatt gtccttgtaa agtacattgc catctcagaa 900
ttaaaagatc cactctcatt tattatgcag aagttagtgg tcattctttc ctgtagatag 960
tttatctcat gtaaagaccc acccagcttg gtttaaatat ttttctcact gacgtataac 1020
catcagcttt gatacttcca ttttcaggct cagactttga atttaaggaa actaaagatg 1080
actttatttt cttttctctt ggtttttttt ttccaaaaac aaaaaataaa tccattacat 1140
gttaacataa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaacggacgc gtgggc 1196

```

<210> 118

<211> 975

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (794)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (845)

<223> n equals a,t,g, or c

<400> 118

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tgtccctttt tattctagag gcttttcctt taattcagag attagtggag ataataacgt 60
cagtcaaggc taatgtggta catggaactt gctaattggag gttggacatt ctgtttcagt 120
cttacatgga tattgtttca ttggtgttga ggaagaaaaa aattagatac taccatgcat 180
tgggacagca taattctaatt attacattga atatggcctt ttaaaaaataa gtattaaaaa 240
gccaatcggt ttctccattt atctatcttt tttgtttgtt ttaatttgg ttgattgata 300
tgcacccagg ccgtcttatt ttactttgtt aaatgtctgt ctaggaagaa ctgtgattgg 360
aaaggaatta attattatac aaataaatct ggtaggatat gagtggagta agtttgcttg 420
aaacagaagt atatttttcta ctttgaatca cctcaccaga gtcattctgtc aagaattatg 480
tataacaatt tatctttatt gcctacatac aacatacttt ttctgaatta agataacttc 540
tatttgtgag ttgaacttca ttatctgcca ttttgtggaa tcaaccttac attytttggg 600
ggractagag ctgattgtca ccacaagggt atatgacaac tctgttctar grcttatacc 660
yattatatag ggktatacct tttttcttat gcctcagctc tgtacctgac aatttatgat 720
tcagtggagc caagctagaa ggaacaaagg tcatctaaca ctgtgatggg gatgaattcc 780
tgagttttac ctgnacaatg aggtggtgcc ccggaattca caacagagta gtgatagagc 840
ataangatgg ctgctccaga tgactcttgg gtttaagtgt acttgtgatt gaacaagatt 900
tttatctatg aagcttgatt ctacaaccaa aataatagaa atgggggggg ggggaatcat 960
gtctgcttat gcttt 975

```

<210> 119

<211> 331

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (331)

<223> n equals a,t,g, or c

<400> 119

```

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ttctaaatag atttctttta atccatgcta tgttttcttt ttcagtcagg tcctacagaa 120
tgactattgc acttgggtcta ttgttttaat agtaaatatt gttattaatc tcctatgtgt 180
taaacgtggg taattgtatt atgttaatac atacttaggg agggaaagca ggtggatgta 240
aatcagtgat tcccaacttc agcagatggw tagcmgtggg agggatcctc tggagctttt 300
tgtaaatatt tccaaaaaag gggggggggg n 331

```

<210> 120

<211> 233

<212> DNA

<213> Homo sapiens

<400> 120

66

```

tcgacccacg cgtccgcccc cgcggtccgca aaactgagag ggataggaaa gaaaaactta 60
tccaggaagg aaaattggat cgaacatttc acctctcata ttaagtctgg caatgatgac 120
tatatgtatt cctgcctaaa taaatcatct attaatcatt aaaaaaaaaa aaaaaaaaaa 180
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aagggggggg ggg 233

```

<210> 121

<211> 2043

<212> DNA

<213> Homo sapiens

<400> 121

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ggcagcagca gccctcggcc ccacccctac gaccagccct tccgtcctgc ccaccccggc 60
agcgactggg gttcctgaag acacataaat cggggagcag ctctgtgctg agcctgcttc 120
accgctatgg ggaccagcac gggctgcgct tcgcccctcc tgcccgtac cagtttggtt 180
acccaaagct cttccaggcc tctagggtaa aaggctaccg cccacagggt ggaggcacc 240
agctccccct ccacatcctc tgtcaccaca tgaggttcaa cctgaaagag gtacttcagg 300
tcatgccttc tgacagcttc tttttttcca ttgtccgaga cccagcggct ctggctcgct 360
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ccttcctggc caatcctcga ggcttctaca ggcctggggc ccgtggggac cactacgctc 480
gcaacttact atggtttgac tttggcctgc cctttcccc agagaagagg gccaagagag 540
ggaatatcca tccccccaga gacccaacc cccacagct gcaggtcttg ccttctgggtg 600
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ctagaggggc aaaagatgga gtgagccaca ggaagtttgg ggcgtggtga gttggaatga 1920
tacgtccatt tctctatgaa atatttgcta ctgactgtt catttctctc tgacatgttt 1980
gttgaatgaa taaataattt gaaacttcaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 2040
aaa 2043

```

<210> 122

<211> 2877

<212> DNA

<213> Homo sapiens

<400> 122

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cttggccaag ctgcagggga tttgggggat gtgggacctc caattcccag ccccggttc 120
agctctttcc caggtgttga ctccagctcc agcttcagct ccagctccag gtcgggctcc 180
agctccagcc gcagcttagg cagcggaggt tctgtgtccc agttgttttc caatttcacc 240
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cccgtggaca gagtggaacg cttggaattc acagctcatg ttctttctca gaagtttgag 360
aaagaacttt ccaaagttag ggaatatgtc caattaatta gtgtgtatga aaagaaactg 420
ttaaacctaa ctgtccgaat tgacatcatg gagaaggata ccatttctta cactgaactg 480
gacttcgagc tgatcaaggt agaagtgaag gagatggaaa aactgggtcat acagctgaag 540
gagagttttg gtggaagctc agaaattgtt gaccagctgg aggtggagat aagaaatatg 600
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ttattcaact gaagccagca ctggtaacat ggtgattagt aaactcaatg acaccacact 1260
tcaggtgctt aaacacttgg tataccaggc agtataaacc atctgcttct aacgccttca 1320
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aaggaactta aaactcagta tggcgtctag ggattctttg tacaggaaat attgccaat 1920
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```

<210> 123
 <211> 681
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (101)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (223)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (224)
 <223> n equals a,t,g, or c

<400> 123
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 ggcagcttct tcgatcaagc tgacattatg ggatttgtgg nccttggatt caccacacac 120
 aaaacagagg aacttcccat catctctgca gaaatagtgg aacatctcct ggtgcctcgg 180
 gcaatgtagc ctcttttctt tttggactgc acctcagagg ctngtagag ctttggattt 240
 tctccaccag attccgcaac agcgagttga acctgattgc gttcttctct acggaagttt 300
 tgcagagggg acatttgaaa aatccacatg atgtttcccc aatctgagtg atgcatttga 360
 ggcagaaatt gtgcccacag tcgatgggtga caggtttctg cagaatgtcc aggcagatgg 420
 ggcagatcac ttctctttgc agtttgttca caaactgccc actggccatg acagaacaac 480
 agggctgttt caagactgta ggaagctgtg ccaagtctgt aggagccccg gagtccactg 540
 tggatactgt ttctaggaag ggagaaggga gtcagagaaa gtggagggtca gagattctgc 600
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 atagaaaagc gtaaaaattta g 681

<210> 124
 <211> 606
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (34)
 <223> n equals a,t,g, or c

<400> 124
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 aggcataattt cttaacatat atcaagcaaa gtctgtttaa aagatctaaa tgaagaatgg 180
 agacctcagt gattaaagat attttgtttc tgaccttgag cagattgctt acctgtttctc 240
 tagactataa cccaacatgt aaaaaaaatt tgaagatggg gatgaggaaa gtgagatata 300
 tatatatata tgtattaygt ttctagcact tttccctttt aaaaagtgaa aatattccttg 360

69

```
tacatTTTTg aaaaatatat tTycagTyct gaaaaatgta gcagaagtag tgaaaatgyc 420
atatTTTTaaa tGttgattat tagataaaatt taacctgctt agggTTtatt gtaactacac 480
ctttcagacg tGtGtttYgg agtagtggaA ttgccagcca ggccctgtgg cttggaaagg 540
catcccagaa atcctcggcc agaaggTgtg gcttGttaaA gcattgagat tcmgagtatt 600
ttggtt 606
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<210> 125
<211> 1211
<212> DNA
<213> Homo sapiens

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<400> 125
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acctcgctgg acctggagtt agacctgcag gcgacaagaa cctggcacag ccaaytgacc 120
caggagatct cggtgctgaa ggagctcaag gagcagctgg aacaagccaa gagccacggg 180
gagaaggagc tgccacagtg gttgcgtgag gacgagcgtt tccgcctgct gctgaggatg 240
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gggcagctgc caaggatgtg cacaggctcc gagggcagag ctgtaaggaa cccccagaag 360
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gtcctctagt gctcttggtg gtttgaagat gaaccgactt tttagtttgg gtcctactgt 600
tgttattaaa aacagaacaa aaacaaaaca cacacacaca caaaaacaga aacaaaaaaaa 660
accagcatta aaataataag attgtatagt ttgtatatTT aggagtgtat ttttgggaaa 720
gaaaatttaa atgaactaaa gcagtattga gttgctgctc ttcttaaaat cgtttagatt 780
ttttttggtt tgtacagctc caccttttag aggtcttact gcaataagaa gtaatgcctg 840
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ttaacatatt ttgtacaata ttaaaaaaat gcacagaaac cattgggggg gattcagagg 960
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ggtctcagat gcccagtgaA gccactaaca tgagtgaggg gagggctgtg gggaaactcca 1140
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aaaaaaaaa a 1211
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<210> 126
<211> 881
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (7)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (16)
<223> n equals a,t,g, or c

<220>
<221> misc feature

<222> (34)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (37)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (41)

<223> n equals a,t,g, or c

<400> 126

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ccagggtcag caaccaaga agcctgactt ccaagctgtg cttttaactt cccaccatg 180
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ttggtctcca caacctctta caaccaggc attcctttct atcgataatt actctttcaa 600
ccaattgcc atcagaaaat tgttatatct acctataatc tagaagcccc cacatcaagt 660
tgttttgcct ttctggacag gaccaatgta tatcttaaat gtatttgatt gatctctcat 720
gtctccctaa aatgtataaa accacgctgt tccccgacca cctggagcac atgttctcag 780
ggtctcctga gggctgtgtc acaggccatg ttcacttaca tttggctcag aataaatctc 840
ttcaaatatt ttaaaaaaaaa aaaaaaaaaa aaaaaactcg a 881

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<210> 127

<211> 917

<212> DNA

<213> Homo sapiens

<400> 127

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ccatcttcac attttgcttc catatttgaa gagtctcacg tgccagtaat tgaagaatct 60
ttgagagttc agatatgtga aaaggcagaa gaattaaagg acattgtgcc tgaaaagaaa 120
agcacttta atgaaaatca gcctgagata aagcatcagt ctcttctcca gaaaaatgtg 180
agtaagaggg atccaccag cagtcatggg cacagtaaca agaaaaatct attaaaagta 240
gaaaatgggtg ttacacgaag aggtagatcg gttagtccca aaaagccagc cagtcaacat 300
tcagaggaac atttggataa gattcctagt cctctaaaaa ataaccctaa aagaagaccc 360
agagatcaat cctcagccc cagcaaaggg gaaaataaaa gttgtcaggt cagcaccagg 420
gcaggctctg gacaagatca gtgcagaaaa agcagagtcg tcgccagccc aaaaaagcag 480
caaaaaattg aaggaagcaa agctccatca aatgctgagg ccaaattatt agagggtgta 540
agtcgaagaa tagcaggcta tacgggcagt aatgctgagc agatcccaga tgggaaggaa 600
aaatcagacg tcatcaggaa agatgcaaag cagaatcagt tggaaaaaag cagaacaagg 660
tctccagaga aaaaaatcaa aagaatggtt gagaaatctc ttccatccaa aatgactaat 720
aagactacaa gtaagaaggt atctgaaaat gaaaaaggaa agaaagtaac cacaggagaa 780
acaagttcta gtaacgataa aataggagaa aatgtccagc tatcagaaaa gaggtggaag 840
caagaacctg aagagaaggt agtttcaaac aaaacagaag atcacaagg gaaagaacta 900

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gaggcagctg tacaaaa

917

<210> 128

<211> 1287

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1142)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1233)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1265)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1271)

<223> n equals a,t,g, or c

<400> 128

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tttaaaaacc cctggagggt ttaaccttgt gatgccttta tgaatatect gttgaaatat 60
ccttccccct atgccttata aaccagagaa agccctttga agccttataa tgccaatgga 120
agatacttag aagtaaaca aatagagagg tatatgtaga ttttcttagg tcattagttt 180
gtgtctttgt ctggtaggct gaaactactg tcatatgact ctctccctgg ccagatttta 240
atagtcatac taatactgat gtgaatcctg ataattaaac tatcttgtca ttacatttgt 300
agataaagtt ttggttagaa atgattttgt atgtgttagg tatggtaata cagtctcaa 360
taaaagggtca tgttaagata aaagggtcatg cttacttttt aattaatttg tgtaataaaa 420
tttaggtcct tggaaaactt atttttcaaa taaatgaacc tttcaaataa aaaagagaat 480
tagtttaacc tttatctcat ttcctattat aggggtattg aatggacaag tttgactagt 540
tttctttctt ttgctacctc aacaccaaac aatatgggat tagtgagaaa tgaacttcaa 600
ctggttgatc ttccaacagg tttgttttta aagatccaaa taggtttgtc atattgaata 660
aacatgttgc catttataaa acatgtttga aagtacttct ttcaccttgg aatttttttt 720
tatatttcat gcttatatat ttatyctttt attctctaata aattgcccta gaaaggcctc 780
atcattgttt acatggaaat gttgttggca caaatatcat gtaaaatgga ggaccattag 840
cctgaamaga cagattcatt aaaaaatagg ataccgggtc tacttttaag tgcattgtta 900
tatgtaacca actttaaaag atcgatttaa aaataactct gtcaatggac tttattagag 960
tctgtgctgg aaattttggc ttttatagga aacacttaga aaatttatag gtttaaggatt 1020
gttttttaaat gctcaaatlt aaaacttgta atagtctctg gcygaatgga atagagaaac 1080
ttaatttggg attttgaaga ttctacagta ggaaacgtcc ccaataaggk aactttttca 1140
gnaattggaa agcctaaacc ccagtgaatt tccaaaataa rgaatttggg aaattataaa 1200
gggraagrgg ttccaaatta ttttcctggg ggnatgcagg aagggttcaa aagaggggtt 1260
ttttnaaat nacaattgtg atgaggt 1287

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<210> 129
<211> 603
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (391)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (517)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (580)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (602)
<223> n equals a,t,g, or c

<400> 129
cgcttgggct tggcgggtat aggttgcagt gagccaagat ggtgccactg cactgcagcc 60
tgggtggctg aacgagactc cgtctcaaaa aaaaaatcta aatctgacat ttgatgctat 120
ttttattaat attggaatgt tctgtcttga actttattca atataatcaa gaataaagat 180
agagtaaacg tcaactgattt gtaçtattaa gagagaaaaa atatgccaca caactaaaca 240
taggttttaa ttatgaagaa atttagaata gaggtttatt agatttaggg aactactaaga 300
acaaaaaagg aaggagtgat acctgcctga gtggacagct gtaaatacagc tgtaattact 360
gcagttgtwc caatagttgt gartggctcc nagtcmcttt argagtcctt ggaartwctt 420
ggtacacatt tgttggctgt wccttaaagg aartggcaar tccagtttgt tcyctctacc 480
acactaract gccactgaca agtttgggtc tgttggnttc aaaattttgt aagccatttt 540
cacaagtaca aagatacatt ttaaccttgt cttctccaan attactgagt aggaatttta 600
tnt 603

<210> 130
<211> 532
<212> DNA
<213> Homo sapiens

<400> 130
ccacgcggctc cgaagagagg ttggtagaaa aactaaaact ctacaatcta tttcttaaaa 60
ataatgtttt tcttttcttt ctttcctttc tttctttct tttctttact tttttttttc 120
ttttcttttc tttttttttt tttgacaggg tctggctcta tagtcagggt tgagtagagt 180
ggtgtgatca cggctcactg caaccttaac ctctaggctc aagtgaccca cctcagcctc 240
ttgagtagct gggaccacag acacaccacc atggccagat agttttctgt attttttctt 300
tgtagagaca gggtttcacc atgttgccca ggctggcttc aaactcctga gctcatgtga 360
tctgcctgcc tcggcctccc aaagtgctgg gattacaggg atgagccacc acatgtggcc 420

73

cattttttct tcataagtga gttttagtgg tttactttgt tctaattttt tgaggctatg 480
ttcaggaagc catacagctt gaataagtaa ccatctcagg agaaaaaaaa aa 532

<210> 131

<211> 776

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (630)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (669)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (769)

<223> n equals a,t,g, or c

<400> 131

aatcctcagc cattttgtga aaatagccaa gaaactteta gaactcaaca accttcattc 60
tctcatgtct gtggtatcag cattacaaag tgctcccatc ttcaggctga caaaaacctg 120
ggctctttta aatcgaaaag aagactacct ttgagaaatt ggatacctga tgtcgaaaga 180
agrraattac aagcggacac ggggaatatat ccgargcctg aagrtgggtc caagtattcc 240
ctatctagga atctatcttc tggrrtttaat ctacattgrt tctgcatatc ctgcctcagg 300
agtaatcatg gaaaatgaac aaagatccaa tcagatgaac aatattcttc gaataattgc 360
tgattttacaa gtttcctgca gctatgatca cctcaccacc ctgccccatg tgcagaagta 420
cctgaagtcc gtacgctaca ttgaagagct ccagaagttt gtggaagacg acaactacaa 480
actgtcgctc agaatcgaac caggaagcag ctctccaaga ctagtctctt ccaaggaaga 540
tcttgtaggt cctcttgctg gctccgggtc tgcgagggtc agccggaggc acctgtcctg 600
acacatctgt tgctggcagc ctcccacacn ctccagtgcc cagacacagg gaagagccac 660
agcctaggna acaatatgga tgtgttcagt tgagtgttag ttgaggagta aaagtgcgac 720
atttccttc ggagaaaggc aagggcacct acttggaaga cagtgttcnt agagtt 776

<210> 132

<211> 689

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (348)

<223> n equals a,t,g, or c

<400> 132

atcagggacc cttttgatcc aattatagtt attgggcaga tacagtagta ccctattatc 60
agaagaccta gtttcaaadc ctgagtcagt ttctaattca ctgtgtgacc ttgtacaagt 120

```
cacttaagct ctctgatcat tggttcaaca tctttaatat gaggagagta atgcctatct 180
caattacctc ataaaattat tgcaaagatc aagtgagttg atatgttaca aattatttct 240
aaattataag attctgtata agtggaaggg ttaagtatac tcccatatta ttaaaccacc 300
tacgtatcac tcaggattct atatgactct gagttctcaa tttctagnaa atgggtcccat 360
ttttgctttg ttccctacaa ttctacggag tctttttttt ttwaaaggaa ggggtgtaggc 420
aaaggtaa at gggagaaaac atggaatcac ataccactct ttgggtgctgc taggcaagaa 480
ttttaaactg agtttaggtc accatcgtgg acttaaggtc catatcacct caggagagaca 540
agtagagtgg gaggcattca aaaggtaggt gattcttctc cctcttagtg aagaatacaa 600
ggtcaattta caaaaaagca ccagcagcaa ataattggaa aattaaattc ataaamcatt 660
tataatagcg tcaaaaaaaaa aaaaaaaaaa 689
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<210> 133

<211> 555

<212> DNA

<213> Homo sapiens.

<220>

<221> misc feature

<222> (4)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (36)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (308)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (471)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (484)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (489)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (510)

<223> n equals a,t,g, or c

<400> 133

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ttcntgccccg ccccatcctg tgctttggcg taggcnatca ctgaagactt tctattttctc 60
cattagttca ttcattcttg tagctagact catgacggag ctgctgccac cccagcagat 120
ctgctcgccct tgctgcttct tcaagggtctc cagggccttc gcagaggtgt cagcaactgc 180
catgaccact tgcagcagtt ggctgtagga agtcagattc tgggtgcgtgg cctggatgat 240
ggggccgcac ggggtggaggt cagggcctgg gcgctggcag cactcgccca gctcgctcgtc 300
gtagattngg agaaaagcca agattagctg gtggaagtcg gaagtgacca gacgcagctt 360
ctggtctagg gtgctgatgt cggctgcgcc cgcaarccc cttgcttcat gctgtgcaaa 420
ktactccgtt tctaaagcgc gtgcaattgg gcagcattct cctggcagtg nctgggcaac 480
ttcngccanc tttttcttct tcttcggaan ttggcaaagg catgggcccc atggccatca 540
tcaatctggc ttgtt 555

```

<210> 134

<211> 790

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (776)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (780)

<223> n equals a,t,g, or c

<400> 134

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gcaagaatat aaaattctga ggccattttt agctctaagc cagaccatgt tataacttct 60
taactgaata cttcttatct atactttttt tctatatctt tccatctatc tgtaagtagc 120
ttttcccatg atctgacttg tttatatttc ctattaactg acaaagcatt taaaaacagt 180
taaaaaattgt ctgcagaggc atttttaaatg tcaagacatt ataaaaatact ttagatttat 240
acagcaattg tgaacacctt tgacaaatga acatgtctgt tcagcctttt tggtagccct 300
ttttattttg cttaggtaga tcaaattcta agttgatctt ttctagcagc agggtcagag 360
tctagtgatc gtttttaaaa tggcttagat gctaccttct ttttctgaga actcagtgtg 420
atataatcct tataagatat tgacagctaa ttttatggat taccctaccg ggacagtggg 480
acctaagtag tttgaagacg araaattgtt ttgattcaka agcaatgggt tcactagtga 540
aaggaaagat cccacgatcg taagtggtaa atgtttatat ttgttgaata actctctgaa 600
aaaaggaaat aaagtagatt agccttggtg agaggtggct taagagtggg tttatgaatc 660
taagttttat ttgaaaaatg tgtgaacttg ttttaaggtaa atgtgagaat taataaagga 720
attgagaaga aagatatttg atcgtttttt ggaataacat ttaccaat taagangtn 780
aactactttt 790

```

<210> 135

<211> 1408

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (116)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1364)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1381)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1393)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1399)

<223> n equals a,t,g, or c

<400> 135

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tttgccagct ctgaatcttt attttaattg atctttttat tgatgtgtta tataaatgag 60
gaagaaaaat tttgtctgat tatgtgaagg atctttctgt acatgaaaag aagggnaaat 120
aaacttgcaa ttgaatagac tgattatagt agcactgaga cacaaaaaga ttgaccatgt 180
tgccctccag acactcatac aaggctcgtg acaccagggt gaaggcggac tatttaggggt 240
ggtaaaggaa ttatgattgt tcttgagcca aagtaattta gtttgaatat aatgaaacat 300
accctgtaaa gactgctaga aagtaaaagg attcgtcttc agagggttga gaagggtgcc 360
ttcttagtta aaaccaaact gggaaaagta atactggata aaatattcag gataaatttt 420
gcctcagcag aatttcaaag ggcagttgtt cctctgtttc attattgaat sttcagaata 480
tagttaaagc caaargctta aaatatgtta aatgtttcac ttataaccat aatcttttta 540
catagagcat actctgcctt cataataact aaatcctctg catgtggtag atgagtacgt 600
ttaggaaata ttgtcagtg c aattaaatgg cctacacttt aaacagtatc ataaaaacaa 660
atccttaaat atattctact tgagtcacaa aagctgaaca acagaaagggt gttttgtttt 720
tgccctttct acagtgttgt ggtgagaatc agatgagata gtatttkgac taaacacttc 780
tgaaattgta aatatatggt ggcattattg ttcttatgtc ggcttaggag gataccaaaag 840
gggaagttaa tggtcacagt gcacttatgt agctttctaa gctactcaat gtgattcttg 900
ttctctttgc tgttcttttt ctcctcccc atggtgtcct tcagagagaa aaggaatgta 960
gataaatgaa tccctgcaga tgtgtcctga catttcaggg agggacaggg tataatgatg 1020
ccatcctgca aaggcagcct gtgtgagaaa aagaaatcaa ataatgtgga ttttaaaatt 1080
acaaaagaca ttcatTTgca gtttatgaaa ggaaaatgta gtttggatac aaagctgatt 1140
aaattggatc aagaaatatt agaattaaat gcaaaaaata atccatgcat ttatggtttt 1200
gatttttata tattcccagc tagttgaaaa tggatgattc ccacaagaag cataactcag 1260
cttggttcct gcttaccgga gtatttccac tatggtatat attgatacat tccttccatt 1320
atggtaggtt gtataaccaga ggtaccagtt accggtgggg atcntaattg gaattttggc 1380
ncccggggtt ccngggganc ctttacia 1408

```

<210> 136

<211> 902

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (814)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (902)

<223> n equals a,t,g, or c

<400> 136

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aattcggcctt tcgagcggcc gcccgggcag gtacttataa ttttggcctt ctgcactact 60
cttttgctct tacgaacata atggactctt aagaatggaa agggatgaca tttacctatg 120
tgtgctgcct cattcctggg gaagcaactg ctacttgctt tctatgcctc taaaatgatg 180
ctgtttttctc tgctaaagggt aaaagaaaag aaaaaatagt tggaaaataa gacatgcaac 240
ttgatgtgctt tttgagtaaa tttatgcagc agaaactata caatgaagga agaattctat 300
ggaaattaca aatccaaaac tctatgatga tgtcttccta gggagtagag aaaggcagtg 360
aaatggcagtg tagaccaaca gaggcttgaa ggattcaagt acaagtaata ttttgtataa 420
aacatagcag tttaggtccc cataatcctc aaaaatagtc acaaataata caaagttcat 480
tgttttaggg tttttaaaaa acgtgttgta cctaaggcca tacttactct tctatgctat 540
cactgcaaag gggtgatatg tatgtattat ataaaaaaaa aaacccttaa tgcactgtta 600
tctcctaaat atttagtaaa ttaatactat ttaatttttt taaagatttg tctgtgtaga 660
cactaaaagt attacacaaa atctggactg aagggtgcct ttttaacaac aatttaaagt 720
actttttata tatgttatgt agtatatcct ttctaaactg cctagtttgt atattcctat 780
aattcctatt tgtgaagtgt acctgttctt gtcncttttt tcagtcattt tctgcacgca 840
tcccccttta tatggttata gagatgactg tagctttcgt gctccactgc gaggtttgtg 900
cn 902
```

<210> 137

<211> 730

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (606)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (647)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (671)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (685)

<223> n equals a,t,g, or c

<400> 137

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tacttcagat acactagtaa agcctgctgt attccaacta atgaggacag atatgtaata 60
tatatacatg tatatacgta tgtatgtata tatactatat atataattat actttaagtt 120
cctaaggtag atgtgcagaa tgtgcagggt tgttaaatag gtatacatgt gccatggtgg 180
tatgctgcac ccatcaaccc atcatctaca ttaggtatgt ctcctaatagc tatccctccc 240
ctagccaccc acccccagac aggccccgct gtgtgatgtt cccctccctg tgtccatgtg 300
ttctcattgt tcaactccca cttatgagtg acaacatgcr gtgtttggtt ttctgttcc 360
gtgttagygt gcwgagaatg atggtttcca kcttcatcca tgwccctgca aaggrcatga 420
actmattcct ttttatggct gcatagtatt ccatgggtgk tatgtgccac gttttcttta 480
tccagtctat cattgatggg catttggtgt ggttccaagt ctttgctatt gtaaatagtg 540
ctgcaataaa catacacatg tctttatagt agaatgcaca tgtctttata gtagaatgat 600
ttatantcct ttgggtatat aaccagtaat gggattgctg ggtcaanggg cattctgggt 660
caagatcctc naggattcac cacantgtgt tccacataat ttaagctatt ttactctccc 720
accagcagtg                                     730
```

<210> 138

<211> 524

<212> DNA

<213> Homo sapiens

<400> 138

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ggcagaggag gccactgtgc ctggtcaaga aatggaactc ttacacactg ctggtgggaa 60
tgtgaaatgg taagccactt cggaaaacag tttgacaatt tcttatgcta aaaatacacc 120
tatcagatra tttagccact tctaggtatt tacttaagaa aaaataaggc atacatccat 180
atgaaractt gtaataaaat gttctcatta tttttatttg aaatagctma aactggaaac 240
aacccaaata tccatcagca agtgaatggr taaacaaatt gtratatattg tatgcaatat 300
aacaccactc agtaatatga aaatgaacta ctgatgtttg caaacgcttg aaattcaaaa 360
taattatgct gagtgacaga atccagacca caaataatac ataatgtwtt attctatttta 420
cataaagttt tagaaaaatc caaactaatc ttartttacc aaagccatac caatggtata 480
tggggcttgg ggcagkttaa acsgattatt gaaaaaaaaa attt 524
```

<210> 139

<211> 869

<212> DNA

<213> Homo sapiens

<400> 139

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ctgattcctc ctacatatg aaaagtgaag gttgtgagtt gttttcctct tatttaaaca 60
ttggcctatt ataattctgt ttggttattt ttctcctgta agcatcctga tttttctgta 120
ggaacttttc tttaaatgac acacattgcc acttgtgtag atatttttaa gttctttggc 180
taagtcctct cctaactgcc tgtcctctgg ttagggccct cctctccac tagtggtgaa 240
tgcatgtgtc tgtctgatca gcatcactgc acacggaggt ctagtgagec tcttgctaag 300
tgtcacacac actcttccca aagacgtgat gagttaaagt tgtattctga aatcatgaag 360
ccagagcctg tgccagacct tctgctacct ctcatagaat tgctctgtaa ttctaaattt 420
aaaattagaa gtagagagag ataagccatc gcccttttgc ctctgagaat tggctgctgt 480
ttctaataa attattttct aagatagcca gatagttaga aaaagatttt cattgatgac 540
atatctttaa actttcttgc atcagtattc taaattgagc aaactgaaag attttcatca 600
```

```

ggaaaggagc actgtgggaa gagcccagta ttcacatttt ttccccattt ttcagaagcg 660
acatttcata tataggtgcc aaaagtgaat cgggggtgcgg agagtgggaa ccttttgaat 720
ttatgattgt cacagagatg gtagaaatta tgatctgact ggaaaaacaat cctgtatccc 780
ctcccaaaga atcatgggct ttttttttga attaaaaagc agacaaatag actttctcgg 840
gaaaaaaaaa aaaaaaaaaa cgcgggccgc 869

```

<210> 140

<211> 586

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (5)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (439)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (563)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (577)

<223> n equals a,t,g, or c

<400> 140

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ggggnaccag cgcggggtgcg cagacgaaag gcgctctttg ccagctgaaa gttcccacgg 60
aaaaactacc atctcccctg cccaccatgg cagacgaaat tgatttcact actggagatg 120
ccggggcttc cagcacttac cctatgcagt gctcggcctt gcgcaaaaac ggcttcgtgg 180
tgctcaaagg acgaccatgc aaaatagtgg agatgtcaac ttccaaaact ggaaagcatg 240
gtcatgccaa ggttcacctt gttggaattg atattttcac gggcaaaaaa tatgaagata 300
tttgtccttc tactcacaac atggatgttc caaatattaa gagaaatgat tatcaactga 360
tatgcattca agatgggttac ctttccttgc tgacagaaac tggatgaagt cgtgaggatc 420
ttaaactgcc agaagggtgna actaggcaaa ggaaatagag ggaaaataca atgcagggtg 480
aagatgtaca ggtgtctgtg catgtgtgca atgagtggaa gaatatggct gtagccataa 540
aaaccctgtc aaataaaacg ggnaacattc aggccangga cactg 586

```

<210> 141

<211> 614

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (546)

<223> n equals a,t,g, or c

<400> 141

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aaataaaaag gcagtggccc caccacatTT ttttcagcat agtagctggc attttgttat 60
cattagccag agtagcttca gcatataagt tattgatgtt ttccaacttc aaaagtgcatt 120
tttatcctcc cagtaaattt gataatgatt tgtcacagct ttgtcatctt ttgacttttg 180
cttatgggcc tcacttcgta caactataac atgaaaaagg attgtcctaa agtaagggaa 240
tcagttaatg gtaggatgaa gaaactgtaa aaactcctag aaaaaaaacc tgtgtgcatt 300
tttctggaaa gttttcaaac tgtgtaattc agttttcatt caattatata atttggttat 360
atgcttttaa aaacatttgt ctaaagtgtc cgggttttct tctggtctta gagtcagctg 420
agtgtgggt atgcagccac tcgtattttt gcaccagaa aggagtaact ccttttatat 480
gaagrttttt tttttaagct tagatgctat gtaaggagaa aactatttgt aatcacatag 540
taccnnggr ggggagtgrt ggatgctttt ttaaaaaagg rtatttaagt atattatgta 600
atttaaatat aaat 614

```

<210> 142

<211> 574

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (19)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (522)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (574)

<223> n equals a,t,g, or c

<400> 142

```

ntgttaagtt ctgacattng gagaaaatac attacaaaga acaggagctg gtttttgggtt 60
ttccttggtg ctgtgttttt gaattgaagg gatgtgggat ggtggtgaca gaagtctgag 120
catagtttct gaataattgg aggggagatg ggcattcttt gggactatgt ccgcattaca 180
ttgagttttc tccctctagg aagagagagt ttgtgtttta ttttctgtaa gtaaaagcta 240
catgtttagg atttttaaac catattaatt gttatatatt gtatttcata attatattat 300
gtgttagtgt gtactggaat aacatgtttt atttggttag ttggtgcaaa agttttctaa 360
atctactgct gtattagaaa ctgaaaaggg agggaaattc cagatgtttg atgggaacat 420
cactggtgaa tatctaggrr tggttaagtag acycaagggt gaagragtaa ggtgggggta 480
acccttaata ttaccttkgg tatatgcccg tttttagcac cngaatacag ggggtccttt 540
gttccccaac cttaacagca gccctgtct ggttn 574

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81

<210> 143
 <211> 2012
 <212> DNA
 <213> Homo sapiens

<400> 143
 tatgcaagct cgaaattaac cctcactaaa gggaacaaaa gctggagctc caccgcggtg 60
 gcggccgctc tagaactagt ggatcccccg ggctgcagga attcggcacg agtgtagagc 120
 tcaaagaaat ctgccaacat gtatgtggac tcttgagagg tgggctttcc cagtacatgc 180
 taaacagact tgttatgcc aagaggaagt aatagaaatg atagcatcaa atatccaaac 240
 tgacaggaag tttcttttgc atagcataga acatggttgt cttctgagtt ccactaatgt 300
 tccaggatat cttggccctc tgccctctggc tgctccctgg tgtttggcac catagcgttg 360
 tcacttacaa ccattgcctt gggacacaca gagtgaactg tttgagtgat aagtaattta 420
 ggtagaaact ttacccttaa tttcaaataa taccacacag ctcatctacta cccaaggga 480
 cgctctccgt agcttctgga ttccccagtt tccttctaga aacaaggact ccaatagcac 540
 tataacccta aacaggccct aaccacagaag aatacaccac aaaatgcgat tgattttctc 600
 aaaatatcac agtcttagac actatacaaa taattcaaga aaattctttc taccctgcag 660
 tggatatagt attctattat attctccagc aaaactttta ggacttttca aactcatttc 720
 taagccaaat agtttagata aatattttacc cttatatattg gggggaattc aggctcacca 780
 tttgccgagg caagcccatc aacagtctag aggcattatc tgtgtcatc cttcccgctc 840
 cttctataga atactacttt ttctttttgt ctctggcca ttctccatca tctgtgatt 900
 attgctaacc acaggatgct ggcaaagctt acagtgatag gcacatgtgt tcagtgtatg 960
 ccaatacact cttatcacag tggttattgc ttcttactct ttcaaagtc attattctac 1020
 ccctcaacct atatccaatc attagaacta tacctgactg gagccagaa cttgggacca 1080
 atacttaatt caaatagcag gggcttgctc acaaacatta agcccaaaaa gaagcacagc 1140
 actttgaaaa gtcaaataag cctttggtag ctctgtacat ttgcaatttt acatttggtta 1200
 ttagtttata gcactaataa cacttcagtc gtgaatctac agtctcaata tgataagtct 1260
 tagaacatgt tctagaaata gtggtacctt gctgtctatta tacttagtaa cttatacccc 1320
 aatataataa taagtattaa atacagattg tgtatgcatt ctttgtgtgt atatgccaac 1380
 tgtactactt aacctcactg atgagcaatt agaaaaatac acaattgtc atagtgaata 1440
 taagtcttgg tcaattcaga tgatacgtga acctgataaa tgctctaata gatatgctat 1500
 tttgtcctgt attgcttgtt ttacagtatg gtgcatgttg tttgctaagt aaaatgataa 1560
 taataataaaa gtataccaat ttttaaggta gaattaaaaa tttgcacata tgcttcttga 1620
 tattctgaaa tgtattctgt ggcttaatta tcttattcat acacatttca ctttggcttt 1680
 ttaccocctag gaaataactg tccaagtata tatctcgtct tctttcttgt aactttgatt 1740
 aaactgctta cttcaactta caacattgta aagccagaat acctcatttt aacagtgaata 1800
 aaaaatatga tgacctgatg tgttctcttg tatttgattt gaactaccta aataggctta 1860
 actgtaataa taaatataca attttggcag gcattttttc ctttgtttgg atgaacattt 1920
 tgttattggt ccacttctaa ttttgcctta aagagttata aactcagtg caataaaaca 1980
 tcttgttata taaaaaaaaa aaaaaaaaaa aa 2012

<210> 144
 <211> 558
 <212> DNA
 <213> Homo sapiens

<400> 144
 aagttttttc ttaccccatc ctagtgagtt tgaaagtggg cctgaccaga atgtctcttt 60
 cccattttgc cccgtttgaa ttaaataata tgtctactct ttaaaggctg aaggggtggg 120
 tgaggggatt gtttctcatt ttgtctccca agtcattttt ctgctgtgaa atatgaccag 180

```

gcttgttagga agactcatct tggagaaaat gtgaagtaat caaattgctt gagattagtc 240
tcctattgta tattagagcc aaaacacatr ataactttgg caacagggag ttgtctagac 300
tcaattttca gaggtcccat tgtagtgagt taatattgct aatcatgtca atcacttgac 360
akggaagtca gtggcaaatc tttaaagtat gcatttgata ctggcaaata tatactactg 420
atgtttcaca aaagaatctt agaatctgta gaaaacatta attacttcca tgaattattt 480
ctaaagtata actttaaggt tttgattttt ctatttaaata aaaaagcyat kgatgkgttt 540
agcakgtccc caaataga                                     558

```

<210> 145

<211> 1026

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (182)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1007)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1014)

<223> n equals a,t,g, or c

<400> 145

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gcatttatat cctgttaagc attaatagct aatcactggg acttgaattc tgatggcaga 60
tagtctcttg cttagtgaga tggagttaac tatttttttag taggaagtga gaacagctga 120
ttttcatgcc acgtttcata gccccacttt tggtagacta ccaccacgct kcttcgcgta 180
anagtyggca tcttggaat gaatgccag ccgctcgtgg gttggtgcaa agaagtataa 240
acatatatca ctaaggaaaa agaaagtttg tcttgccctt ctgacacagt gtgtgcactt 300
caggcaatth ttggaaaata taaaaaattc caawttctgc ctttcagcag catcaattgc 360
taggaacatt tcattcattt ccctgtaata ttaatgttct ttaagcataa tcactaatta 420
taagttgtat cctatttttt tccagcttaa tttctgtggt ttattgaaaa ccaagtataa 480
atgtgactaa aagcattttg ctttgttttt atagttaact ttcytaagggt tatggacatt 540
twataatgta acatttgatt ggcctggcct cttgacaatt cccttctagt tatgcatatc 600
ctccctgttg ccacattttc ttgtttttaa actcagtttc ttgttttcca gttgttgcta 660
tgtataacac ccattctgaa agagagtata taggaagtta ttcagataac ttttgtagta 720
gtgatattca actatagcag taccttaact catgatgagc ttaggaacat aaaagataat 780
tgttgcttga atagcaccct cagagatact gacctaattg gtctggggtg gagatctggc 840
atggtagttt ttttcaagct ccaatcatcg gccagacagt tgctttatgt aggtttttta 900
atgccaaagg cagatatgaa gtagatttaa ttaagacttg acttcagcaa tacaggggaa 960
cttaaaatac ttrtttttct ttaaactgca ggagtcactg ttaggtnttg cttnaaaaaa 1020
ttgcat                                     1026

```

<210> 146

<211> 521

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (440)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (474)

<223> n equals a,t,g, or c

<400> 146

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gggacctggc aagcggcggc tgcagggcag gtccaggggc cacatggctg aggggggacgc 60
acggagcgcac cagaggcaca atgaggaaat tgaagcaatg gcacccattt atggcgagga 120
gtggtgtgtc attgatgact gtgccaaaat attttgtatt agaattascg acgatwtwga 180
tgacccmaa tggacacttt gcttgcasgt gatgctgccs aatgaatacc caggtacagc 240
tccacctatc taccagttga atgctccttg gcttaaaggg caagaacgtg cggatttatc 300
aaatagcctt gaggaaatat atattcagaa tatcggtgaa agtattcttt acctgtgggt 360
ggaggaaaat aagagatggt cttattacaa aaatctccag gtgacagaac caggcccaga 420
tgtaaagga ggaaaactgn aggaggaaga tggtggaatg tggaagggtg atcnccattt 480
ttagcatgtt cagccgggaa agttcggttt aaaagcattg g 521

```

<210> 147

<211> 557

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (17)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (527)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (543)

<223> n equals a,t,g, or c

<400> 147

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ggattaacca ttaaatngat tgaaaaggaa actttgcaag gtatgagctt cataccccca 60
ccaaacaaag tcttgaagggt atttatttta ccaagtatat ttttaaagtt gttttataag 120
agagactttg tagaagtgcc tagattttgc cagacttcat ccagcttgac aagattgaga 180
ggcccatgcc aacagtctaa tctaagagat tagtctttca aactcaccat ccagttgcct 240
gttacagaat aactcttctt aactaaaaac ctagtcaaac aaggaagctg taggtgagga 300
gatctgtata atattctaata ttaagtaagt ttgagtttag tcaactgcaa tttgactgtg 360
actttaatct aaattactat gtaaacaaaa agtagatagt ttcacttttt aaaaaatcca 420

```

85

```

gtagtaaaga tgtaaaatta aaaaatggaa ttctccatta actgtggatt ttactaaata 1020
gaattactgg tgaagcagat ttatccatcg agactatctg gtatgcgtta tgtatgtagt 1080
ctgttgctgc tgaaagatgt ctgtgtgcct gtatcaacat gtgacttcat gtaaagtttc 1140
tttgtgttca cagttcttag caaatgcagt tacaatccat agatagccag cagtggatgt 1200
tactccagga aaatgcagga ttaaaattgt ccttgtgtaa aaaaaaaaaa aaaaaa 1256

```

<210> 150

<211> 698

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (683)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (692)

<223> n equals a,t,g, or c

<400> 150

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cctcgctcaa gccctcagag aagaacattt tcacctctt catggtggcc acagctgcca 60
tctgcatcct gctcaacytc gtggagytca tctacctggy ragcaagaga tgccacgagt 120
gcctggcagc aaggaaagct caagccatgt gcacaggtea tcacccccac ggtaccacct 180
cttcttgcaa acaagacgac ctcttttcgg gtgacctcat ctttctgggc tcagacagtc 240
atcctctctt cttaccagac cgcccccgag accatgtgaa gaaaaccatc ttgtgagggg 300
ctgcctggac tgggtctggca gggtgggcct ggatggggag gctctagcat ctctcatagg 360
tgcaacctga gagtggggga gctaagccat gaggtagggg caggcaagag agaggattca 420
gacgctctgg gagccagttc ctagtcttca actccagcca cctgccccag ctcgacggca 480
ctggggccagt tccccctctg ctctgcagct cggtttcctt ttctagaatg gaaatagtga 540
ggccaatgcc caggggttgga gggaggaggg cgttcataga agaacacaca tgcgggcacc 600
ttcatcgtgt gtggcccact gtcagaactt aataaaaagtc aactcatttg ctggwaaaaa 660
aaaaaaaaaa aaaaaaaaaa ccnggggggg gnccggta 698

```

<210> 151

<211> 1710

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (142)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (208)

<223> n equals a,t,g, or c

<220>

<221> misc feature
 <222> (242)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (317)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (1644)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (1707)
 <223> n equals a,t,g, or c

<400> 151
 aatttcggcc cgagggtgag ggcagctgga gtgcgttctg ccgaagcttg tggttgcacg 60
 cccttcgtct taggggctac cttccgtggt gagtgtgtgc ggtgttgac ttgggggttg 120
 ttctcgtgc gtggccgcac gnggctgaac ccttccact ccatccctc cccgcacccg 180
 gaccagcccc tgggacgccc tcggacgncc acccgctcca accctgggga agcctcagag 240
 tngcagcgaa ggccctyttgc ctttccgct ctgcgcttg tgctatcgcc cacgtgcttt 300
 gttgttgttc ggtgcanacc atgtccaagt ctctgaagaa gttggtggag gagagccggg 360
 agaagaacca gcccaggtg gacatgagt accggggcat ctccaacatg ctggatgtca 420
 acggcctctt taccttatcc catatcacac aactggtcct cagccataac aagctaacaa 480
 tgggtgccacc gaacatcgca gaactgaaga atttgagggt gctcaacttt tttaataacc 540
 aaatcgagga gctgcccaca cagatcagta gccttcagaa actcaaacac ctgaaccttg 600
 gcatgaacag gctgaacact ttgccacgag gcttcggctc cctgccagct cttgaggttc 660
 tggacttgac ktacaacaac ttgagcgaaa attctcttcc tggaaacttc ttctacctga 720
 ccaccctgcg tgcactctat ctaagtgaac acgattttga aatcctgccg ccagatattg 780
 ggaagctcac aaagtgcag atactcagcc ttagggataa cgacctgatc tcgctgccta 840
 aggaaatcgg ggagcttacc cagcttaaag agctccacat tcaggggaac cgcctcaccg 900
 ttctgcccc agaactagga aacttggaat taactggcca gaagcaggta ttcaaagcag 960
 agaacaatcc ctgggtgacc ccattgcag accagttcca gcttggcgtg tcccatgttt 1020
 ttgagtatat ccgttctgag acatacaaat acctctacgg cagacacatg caggccaacc 1080
 cagaaccacc gaagaagaat aatgacaaat cgaaaaagat cagccggaaa cccctggcag 1140
 ccaagaacag ataaggaagg gattggcatc ggctggcctt ccagcacctt ctctctccaa 1200
 cacttcattc tctcttgccc tgtctctcaa ataaacccaa tgctgcgtgt gaggcctttt 1260
 ttatttttct tttactctc tttctaattgc tttccacctt accttttaga ttcttttgct 1320
 aggtgggaga ttgttataag gtcttttaaac catttccatt tgtttcttta acattaccaa 1380
 aagcagggaa caaagctctt attcaactgc gaattccata gtgggctctg gcttttcttg 1440
 aatagatata acaaggttgc ttattatcaa aagaataatt aaaatcatgt aaccatttaa 1500
 atgtcactgt taacactttt cactctttct gttgattcac ctaactcatt attttgcttt 1560
 attaaaagtc ttccttcacc accgagatat gctaatttaa cttacaaatg attttaataa 1620
 aatcttgagt ttgtaaaaaa aaanaaaaaa aactcgagag tactttctaga acggccgcgg 1680
 ggccatcgat tttccaaccg ggtgggnacc 1710

<210> 152

<211> 1121
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (532)
 <223> n equals a,t,g, or c

<400> 152
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 cactccaatc ctggagagga tgccagggac ggggatgctg aggaagtcag agagcttggg 120
 acggttgaag aaaactgagt cttgggcaat ttgtgctaaa actagggtgag ttgccaaacc 180
 caaggcatct taccaacagc tggtttgggg gctgggttcc ctggtgttgt gtgttaccta 240
 ccccttgggt tggcttgacc tctccttggt agctcacctg agccctccca gggccagggt 300
 cctgacagtg ttggttttttg cacatccact ggaaagggtg cattaatgac ccagtgttag 360
 aatgcaagag gtcagggttat tctagccctc atggctgaag gccagtcct ggctccacca 420
 ctctccagc cagaggggtc ggaccatcca gtgctgtcc tcgccacagg gcctccaggg 480
 agcattcggg tcaawtccat ggacaccctg ggctacaaac caaggctgct gntcatccca 540
 catcgtgtgg ggcagtgtcc atcccctgca gctacttggg gacttaacaa ctycaggagc 600
 cctgtcagct gccctcctcc acctaaaccc ctctgactct tctgctttga caaagaaaat 660
 gacattgggg aggggagggtg ctccgcctcc cagcttttct caaaatagtc ctatagatac 720
 tggtaatctg gaaatgaaga agtaattctg tctctgcacc tacttttgca gaatgttcaa 780
 ggaagtattc tgtgttagta ttaatgcaa aaagttgttt ttaaagggtt tgtactcagc 840
 acatcataca aaccacatta cttctgtcac ttcagggcac cgggactggc tggcgccctt 900
 gttatgtgct attttaataca gtgtaacatt ggtcaagttg ttacccatgt atgctgtgtt 960
 tatcatgtgt atatcgtcya gaaagtatta aggccttagg tagatgcaac tggcgaacct 1020
 tggagagggg atgctgattg tcttgaccaa acccacagcc tgtctcttct cttgttttagt 1080
 tacttacggc aataaatcat ctatgagtta gtgcaccgtg a 1121

<210> 153
 <211> 445
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (440)
 <223> n equals a,t,g, or c

<400> 153
 ttttcttgca tctgcccgcg atcttctccc agacctttct gcgagtacga gccaacccggc 60
 agaccgcact gaatgctcgg attgggaaaa tgaaacggag gaagcaagat gaagggcaga 120
 ggggaaggctc ctgcatggct gaggatgatg ctgtggacat cgagcatgag aacaacaacc 180
 gctttgagga gtatgagtgg tgtggacaga agcggatacg ggccaccact ctctggaag 240
 gtggyttccg aggctctggc ttcatcatgt gcagcggcaa agagaacccg gacagtgatg 300
 ctgacttgga tgtggatggg gatgacactc tggagtatgg ggaagccaca atacacagag 360
 gctgatgttc atcccctgca caggcgagga gctgggtgaa gccaaaggaga gagaggcatt 420
 tcggggcgca ttcttaaatn gccgg 445

<210> 154

<211> 798
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (638)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (665)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (698)
<223> n equals a,t,g, or c

<400> 154
agctcttaga caggtacaga gaactacaac ttagtacaga aagcaaagta acagaatttc 60
tccatcaaag taaattaaaa tcttttgaaa gtgagcgtgt tcaacttctg caagaggaaa 120
cagcaagaaa tctcacacag tgtcaattgg aatgtgaaaa atatcagaaa aaattggagg 180
ttttaaccaa agaattttat rgtctccaag cctcttctga aaaacgcatt actgaacttc 240
aagcacagaa ctcagagcat caagcaaggc tagacattta tgagaaactg gaaaaagagc 300
ttgatgaaat aataatgcaa actgcagaaa ttgaaaatga agatgaggct gaaagggttc 360
ttttttccta cggtatggt gctaattgtc ccacaacagc caaaagacga ctaaagcaaa 420
gtgttcactt ggcaagaaga gtgcttcaat tagaaaaaca aaactcgctg attttaaaag 480
atctggaaca tcgaaaggac caagtaacac agctttcacm agagcttgac agagccaatt 540
cgctattaaa ccagactcaa cagccttaca ggtatctcat tgaatcagtg cgtcagagag 600
attctaagat tgattcactg acggaatcta ttgcacanct tggagaaaagg atgtcagcaa 660
cttanaataa agaaaagtca gctttactac agacggangg aatcaaaaatg gcattaggat 720
ttaggaccaa cttctaaatc atccgtgaag gaaatttggc aagcaaataa aaaccagatt 780
cctcggttaa gatgcatt 798

<210> 155
<211> 400
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (74)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (379)
<223> n equals a,t,g, or c

<220>

<221> misc feature
 <222> (383)
 <223> n equals a,t,g, or c

<400> 155
 ggaatctgga agcctgactt tgcccccagg gaagttgggg accgccttcc ctcccttctc 60
 cacctctcac tctnggcacc ctctccaatt gcactaaagt agctgttgtg ccagtctgcc 120
 cccacaagg ggggaggtct ctgcttycag tcttcttccc ccgctgcctc cgctmccacc 180
 ctggacaatc tccttgtttc ccttggtgtc mtggayagct cagctttgta tgtgtgtttg 240
 gggggtgggg gtgggttctg gcttgagtgg gtttggcagg ggtttgggaa gggttagggg 300
 aggatggagg atgaagtctc ctacccctt ctccagctcc aggccacaga agcctgggaa 360
 agggagggtg cctactctng gtngctagtg tgtctttgca 400

<210> 156
 <211> 1757
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (596)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (647)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (648)
 <223> n equals a,t,g, or c

<400> 156
 gccagccacc attttatctc tctaaagtct ggtcccagta ttaaacctat tcttttagtaa 60
 actcatatta ctgttctaaa ttgaagaaat tatttattac tctgtacttc tagactcaaa 120
 attctttatc aaagatagtc tcaaagaggt agtacaagtc ctgtttaact gcactttttc 180
 acattcacag tgcttcctct gatattcttc cttacatcat tatacactgt tgatatcatt 240
 ttactcttct ttctcttcta catttcttaa attttggttc ttttcctgta catgtgtttt 300
 agcggggccc ttttctttga actttgtcta attagcctgt acatttttgt ttcttttaag 360
 gtagaacaga tctttttttg tttctccttt taagtctact ggttttaaaa gaggtaaatg 420
 tatccataga ccacagtgcc ttgctttttc ctctgccagc acatggagca cgggattaga 480
 tgcacaaacc tatttaggga actatttttg tagatgtttg agtttataca gaaattgcag 540
 ctgggtatttt attttgctgt acatttactc aacttgtcca ttagtattta actatntcca 600
 gagtttgttt aggagtaaga attgacccat tcgttagttt accatanntt ttcttggtat 660
 aaaaaggagc cagaaataag ccttattgct aaataattaa ttatgtaagc ccacctaggt 720
 cctgcataag atcccccctc catacttcac aatatatatg tgtgtgtgtg tgtgtgtgtg 780
 tgtgtgtgtg tgtgtgtgtg tgtgtatktg gctaaaaaat tatactgcca aaattactga 840
 ttataaatac ttgactacac tgattgatgg gacaaaatga ttaaagtatt ttcagggatc 900
 ttattccata tgtcaccacc aaagatttct acagtgttat aaagtatata aatattccaa 960
 atttctgtgg ttaaataattt ttttcttttt tttccttttt tagaataaca cagtctgtgc 1020

```

tttccaaaaa tgcttgaact tttatgttgt taagaaatat ataatgatat cttacattaa 1080
gcatgagtct aatttgtatt aattgggatg gactaaattt tcatttgatt atcaggaaaa 1140
ttaaggagtt atatatattaa aagcaatttt ctgtgttttc ttctttgtaa gttgactcat 1200
ttgtgaagca attagcaciaa ttttgagaag atcattgtta ttgtggtttg cagtatatat 1260
ttcttagtaa atatcactta agattaaatt ttccagaaag aaaattatag cttttttccc 1320
aaaatatttt taagatttaa tctttttgta gtatgctaca gatttaatta tattaactct 1380
tttttaagac attgaccatg acttaacatt ttgccttcta acacctttta aatctatgta 1440
ctttaatagt taagagaaaa taagtttgca gatttttaat aatctgtttg taaaaggcta 1500
tctctaagcc tagtatgtgg gtaattttac aggtgtgttt ttgataact ttaataataa 1560
ataaactcat tttatttgtg gcaattcgcg tttctttttt tatgccagag tacatatgtt 1620
ggattccatg aattgggtatt acttattatt atgtgttgat taaatatatg cacacactta 1680
ggattacaga tcacagagca aattatgaaa atcataaaca ttctgggtatg gtcattcata 1740
ggattatgaa aaagaaa
1757

```

<210> 157

<211> 1245

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1245)

<223> n equals a,t,g, or c

<400> 157

```

gaaagccctg aatgttgtac aaagtgtttt gcaaatcaac ttaagcaatt ctacaaacag 60
aggatcagta gctgctaaga aatttaagga catcatatcat tatgatccaa cgaagcaaga 120
ccatgccact tacgaaagaa aaagagatga taagccaaaa gaaagtaaag caaaacgaaa 180
aaagaaaagg gaggaagctg agaaactacc tgagggtgtct aaagaaatgt attataatat 240
tgctatggat ctgaaagaaa tattccaaac taaaaaatat accagtgaaa aggaagaggg 300
cacaccctgg aatgaggact gtggtaaaga gaaacctgag gaaatccagg accctgcagc 360
tctgaccagt gacgctgagc agcccagcgg gtacacgttc tctttttttg attcagacac 420
taaagacata aaggaagaga cctacagagt tgaaacagtg aaacctggaa agattgtctg 480
gcaggaagac cctcgttttac aagacagcag ttcagaagar gaagatgtta ctgaagaaac 540
agatcacaga aactccagtc ctggagaagc atcattactt gagaaagaga ccactagatt 600
tttctttttc tctaagaatg atgaacgact tcaaggttct gacttattct ggagaggagt 660
aggaagtaat atgagcagga actcttgagg ggccagaaca accaacctgc gtatggattg 720
tcgaaagaaa cataaagacg caaaaaggaa aatgaaacca aaataataaa tgtcagctgg 780
ttttgatact gaatgtgaac aaggctcacc taaggaaact gaccagaaa acagtttttag 840
ctgacaaaaga agaaatttca gagtgaagga attttaaaaa tctggctgac ggaatatcat 900
tctggttgcc atctttttct gtggaactcc tctgcatttc ttcctaagta attacttcaa 960
aaattaaatt caacttctta taaaggaaga acaagatagt ccttgaaaat actttttgta 1020
tataatctct ttgccctcta tcctgagtaa ctaatggaca tcttctcatg caaggtttay 1080
atgaagcctt tttwaataaa tgagtcaaag cacttgtatt ttccagccta ggctttgtgt 1140
gaattatagg ctatttgaaa ttttatttct gattatgtca aatacacctt ccgattttgt 1200
catttttgtt taaactgata aattacaagt caacattgag ttttn
1245

```

<210> 158

<211> 379

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (375)

<223> n equals a,t,g, or c

<400> 158

```
gtgagctgag accatgccac tgtactccag cctgggcaat agagcgagat tctgtctccc 60
aaaaaaaaaca aaaaacaaca acaaaacttg ctaccaccca gggattttct gctattttaa 120
aggtgaattht cttttctggt actaaactgt agctgcttaa cttagtaaag gctgtgtttg 180
gccaggcctg tgccagaggt cacctggagt gctccacca ctggcaggca agtcctattc 240
ctattcaccc aggatcccca aggctgggct gggatataaa tgttgggata ggaaagaaat 300
atttcctttt tagaggaaag caagaagaaa cattgcctga aagtgattty ctatgcattt 360
ccattagtac agaangtta                                     379
```

<210> 159

<211> 474

<212> DNA

<213> Homo sapiens

<400> 159

```
ctttatcata ttttacaaat gtgtgagtct gctatggatt agaaattaat aagagatttk 60
gccacagata gtttgagaag ccagcactg ccactcaaca aatgctggtg cattcagatg 120
gtgaaatatt ctgcagctat taaaggagtt aaaactgcct ccacttacct ggaggcccat 180
ctgtgacacc tttttagggt aaaaggaaaa gaaaaacttg cttaggactg aatatgagcg 240
gttgcaattht gtaacaatga tgtatatata catatacatt ttcattgtatt tgtatgaaca 300
taaaagtatt gaaggatatt catcaaactg ctaaaagggt tgcttcagag taacggactc 360
ggagaaggca gattaatttht ctcttaatgg aactctgtat tgtatcactt gtaaaaaataa 420
gcatgtgtta tctttatgat aaaaaagtaa aaacctaaaa aaaaaaaaaa aaac 474
```

<210> 160

<211> 1444

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (4)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (5)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1373)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1425)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1430)

<223> n equals a,t,g, or c

<400> 160

```

gggnntagac accttagaga ttcagcagca agccctgcta agagagcagc agaagaggct 60
gaacagaata aaaatgcagg aaggtgccaa agttgactta gatgccatcc caagtgctaa 120
agtacgagag caaagaatgc ccagagatga cactagtgat ttcttgaaaa actcattatt 180
ggaatctgat agtgctttta ttggggctta cggtgagaca tctctgcca ttgaagatga 240
cgctccctcc ccaccatcac agttgccctc tgcacgggag cgcaggagga acaaatggaa 300
aggactagac attgatagca gtcgtcctaa tgtagcacca gatgggtctct ctctaaaatc 360
tatatccagt gtaaagtgtg atgagcttag agtgagaaat gaggaacgaa tgcgaagact 420
gaatgaattt cacaataaac ctattaatac agatgatgag agttcactgg ttgaccctga 480
tgacatcatg aaacacatag gggatgacgg atcaaactct gtagcaactg agccctggct 540
ccgccctggc acttcagaaa cgctgaaacg ttctcatggc gagcagctga accaggagca 600
gcagcagatt cctggaaaac caggcacttt cacttggcag ggcctgtcga ctgcacatgg 660
ttaaaataaa cctgtactgg acccagtagt gccttttaag gtgaaaggaa tggtaaactc 720
gtacctttaa tatgtcctac ttttggcccc tacctgaaag ttactttttt tccatcatct 780
gtatataaaa ttatttttat catgatgtat attatgtaca taaataaaaag gccatgatta 840
ttgatttata taatagaatt gtatagatta tttttgcaca gttttgtcat aaattaggg 900
ggtaatgaac tggattgaac tactatatgt gcattatatt gaattctgct tgtcattaag 960
ataaggtgaa taagtgtctt aaacgtcctg taaaaccgga ctccccttg ttacatgcac 1020
attttccatt gttacctcga tgcaaaagaa ttcatttagt aggtacatct attgtagctg 1080
tgattattcc agtttctgtg tgatgcaatc aaatgtccta ttaattaatt attatttcat 1140
gtcatttgta gctactgata cagcagaaat gaagggaact gtaattactt gtatttttgt 1200
aagccatacg ttaaagtgtt gttacatcat ctttctgctt ctatttttat gccaatgaag 1260
gcatttgtct tgttactaat tacatgatgt aactacttct tgatataaat aaatttttat 1320
tttaattact aaaatctttt taactactat ggagctttct agactagttt tcnagaggg 1380
gaatagaggt ggggacaccc ggggagtcaa ggacagagga gactnggagn cttccttctt 1440
ccca

```

<210> 161

<211> 449

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (268)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (269)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (368)

<223> n equals a,t,g, or c

<400> 161

```

aattcggcac gagttggaat gtgagatggt ggttgagagt caggatctct tttaaaagtg 60
atcttgagca agttatttaa actttctaata tatcagtttc tttatctgta aaatggaggt 120
aatgggaata cttacctcaa attgctgaga gaattaaatg aaataattct gcaagatagt 180
tatcacagta aagcagtaaa tgctccattc aggggtaccat tactattgac tgccttaaaa 240
atttaattct ctagccaggt gcgaaaannc atgcttgtaa tctcaacact tttggaggcc 300
gaggtgagat gatcatcttg agcccgagag ttcaaggatt aaccagagta acatagcagg 360
gatcttgnet ctattttttt aaaaaagtca ccttgtaaca ctggtgaatt ggataaggag 420
caattcagat gtagcgaatt ttaataatg                               449

```

<210> 162

<211> 573

<212> DNA

<213> Homo sapiens

<400> 162

```

cccaccctga aagccctgag ctttctgcta tcaaagaggt tttaaaaaaa tcccatttaa 60
aaaaaatccc ttacctcggt gccttctctt tttatttagg ttccttgagt tgattcagct 120
ctgcaagaat tgaagcagga ctaaatgtct agttgtaaca ccatgattaa ccacttcagc 180
tgacttttct gtccgagctt tgaaaattca gtggtgtagg tgggtaccca gttagctctc 240
aagttatcag ggtattccag agtggggata tgattttaa cagccgtgta accatggacc 300
caaaatttac cagaccacaa aacttttcta atactctacc ctcttagaaa aaccaccacc 360
atcaccagac aggtgcgaaa ggatgaaagt gaccatgttt tgtttacggg tttccagggt 420
taagctgtta ctgtcttcag taagccgtga ttttcattgc tgggcttgtc tgtagatttt 480
aggacccwat gctgcttgag rcaactcatc ttaggggtggc aaaaaggcag grtggccggg 540
cgcgtggtca mgsctgtaat cctagcactt ggg                               573

```

<210> 163

<211> 1037

<212> DNA

<213> Homo sapiens

<400> 163

```

aattcggcac gagctgtctg cgaagtggcc cttgattaca aaaagaagaa acacaccta 60
acactttatc tccaagttac aaaagtttga ggtgcagagg gaaggccaga tttttttttt 120
aatgaaatta tatagattag atctcagtat ttaaactgtt cctcaatttt gtgaggctgt 180
gttggaataa accgcctct agtgctgttg gtatgcaagg cagcgtgtgt taatcaatat 240
ttcctgtgct caccagaggg aaaaatgtacc aatatcctga caccattctc tctccattta 300
cttctggtgg ttacctgac tcttgactct tagaagtgcc cgagatgggg ctaaccttta 360
ttaaacagat cgcattattat gatcttgctg cagccacagt gcagctccac attaaactta 420
cagaccaaac catttgatc tggcatcact tactaacaca cgacatgcgg cttttctgca 480
tcaactgcta tgacggttaa gaatgtcagt atacaagaag gaatagaaaa ctgatactgt 540
tttaaataat ctgtaatttc aatttttttt tttttttgct gaaatacatt atattgtacg 600
tttgagataa ttctagtaca aagtataata aaactagatg tataataaac cctttaaatc 660
attggtaagt gtacaagtgg tggaaactgaa gcatttactg gacaaagtaa tgttactcta 720
atggttactt gctcgtgcgt tgccacactg tgttataatt tgcttcattt ccttgctatt 780

```

94

```

tgatacatag tgtgcatttc tctgtcactg taactattgt aatgacaaat tttcatctta 840
ctgcacaatc aaaatgacat tgataggaat gaactccaga ggctgggcct gaacagggag 900
gtggtcgctc aggcctgggtg ctcagtcgta cgacctgtac ctctcaactt ttgccctatc 960
tgttaaatat atgctatgtc attaaatgct tttaaatcta aaaaaaaaaa aaaaaaaaaa 1020
aacggggggg ggcccg 1037

```

```

<210> 164
<211> 921
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc feature
<222> (881)
<223> n equals a,t,g, or c

```

```

<220>
<221> misc feature
<222> (908)
<223> n equals a,t,g, or c

```

```

<220>
<221> misc feature
<222> (913)
<223> n equals a,t,g, or c

```

```

<400> 164
ccccccccc ccttgtggac agctgtgtta ataaggccaa ttttctgaga atgtgggaaa 60
gattaaaata ttaactgtt tatctttcac agagtagcag tagctctgat taagcctata 120
ggcaattaaa agtagtttgt ctgtaaaaag agggaaagaa ataagatttc ttacccatt 180
ttatggactt ttaaaaatta aaaaactgcg ccccgccca ggagctcttt tcttatgaca 240
tataaattat gacatttata ttctttatat gactttatgt tctcttctta tgacatttaa 300
attctttaag tagtttggtg gtccaataaa ctagacgttg tataatctaa attgagccct 360
tgtatatcta aaactgatga gttgtttcta aattgttgat tgtccattta cttgcctttg 420
gtattaagat aatgcaagta aagtttagta agtcattgga taatgaaatg attatgtttc 480
tgaagaccat attatatatt taatttttag aggaatcatg ccatcccca aaaaatcaag 540
aaatatttga attttaaatt ataagttcat ttgttaaag acatttttac aaatgtctga 600
aaatcttaaa atactttaca tctacctta agtagtagaa tacagagctg taaatttcca 660
tgcctttttt cctgatatta agttttatag taaaaaagca actagtatt gcacaaagaa 720
tataaaaatc caytcttttt acaaaggtgt gaatttaa atcggttatt attggaatat 780
gaaaataaac caatcattta agagcttttt agcaaatgat ccaattctta ctcttttct 840
cccaagattg gaaaagcata atgtttttcc tcctaaagtt nggaatccta gaaaagcccc 900
ggtgagtnng acnaatgttc c 921

```

```

<210> 165
<211> 465
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc feature

```

<222> (428)

<223> n equals a,t,g, or c

<400> 165

```

aattcggcct cacagagatc atcatcttta ccaccttcaa atcgtaaate aagtactcca 60
aaaaaaactt attctgagaa agccaccgat aaccatgtta atcatagctc ttgccctgaa 120
ccggtgccaa atggagttaa gaaagtatct gtgagaacag cctgggagaa gaataaatca 180
gttagctatg aacagtgtaa gccggtttca gtcactccac aggggaatga ttttgaatat 240
acagcaaaaa ttcggaccct agctgaaaca gaacgatttt ttgatgaact tacaaaagaa 300
aaggaccaga ttgaggcagc actaagcagg atgccttctc ctggaggacg ratcacttta 360
cagamraggt taaatcagga agccttgga gatcgtttg aaggattaat cgagaactgg 420
ggttcagntc gcatgacgct aaagaattcc atgttttgcg cacct 465

```

<210> 166

<211> 752

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (651)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (662)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (684)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (693)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (700)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (711)

<223> n equals a,t,g, or c

<400> 166

```

gtggaaaactt tttccatcct gttttctctg ctatatctgt cagcccccat ytccaccwac 60
atcagagaag acagcatcgt gaagcttctg tggcagcctc ctaaggaagg ggctgccaat 120

```

```

ctgtagttgg cagatgctat aggaattgct tacaaatgtc gtctttaaga aaaatgttct 180
tatatTTTTc ctatgggcaa aatgaaggct tgggtgctca tctaaagctc agccaactcc 240
tgaagcactc tctcagagca tactgctgct gtaatgggct ggcttaatta tcggcagagt 300
gcttgaaaag gctttgcaga cctcccctgc ccccaagact gggtgacttt atatgtactt 360
cattcaaggg taaatcaggg agacgttctc catttatctc ttcgtccttc ctgcctggga 420
aagtgatagc actaaatatt tcccagcagg atggggtagt gtttctcaaa ggaatcacc 480
tttccctacc ttcagactca ttctttaccc ttccattgst ccagtgtga tggaggccaa 540
agacaacccc aggggttttca taggaaattc actggaattg tgcgcaattg tctttgtagt 600
ccttttgctt tttttttttt taaatattta tgttggcaat agcatttgtt ngggtatTTT 660
gntttaaaag gcctcactct aagntattac cgccccctn attggTTTTT naaagacatg 720
tggggggata tagtttttaa aaaataaacg ta 752

```

<210> 167

<211> 1631

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (255)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1620)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1630)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1631)

<223> n equals a,t,g, or c

<400> 167

```

tccagagatg ttctctgtcc tccccgggtc ccacttgctg ytcaataacc ctgccctgga 60
gttcatcaaa tacgtgtgca aggtgctgtm cctggacacc aacatcacia accaggtgaa 120
taagctgaac cgagacctgc ttcgcctggg ggatgtcggc gagttctccg aggaggccca 180
gttccgagac cctgcccgtc cctacgtgct tcctgaggtc atctgccgca gctgtaactt 240
ctgccgcgac ctggnaacctg tgtaaagact cttccttctc agaggatggg gcggctcctgc 300
ctcagtggct ctgctccaac tgtcaggcgc cctacgactc ctctgccatc gagatgacgc 360
tggtggaagt tctacagaag aagctgatgg ccttcaccct gcaggacctg gtctgcctga 420
agtgccgcgg ggtgaaggag accagcatgc ctgtgtactg cagctgcgcg ggagacttcg 480
ccctsacat ccacacccag gtcttcatgg aacagatcgg aatattccgg aacattgccc 540
agcactacgg catgtcgtac ctctgggaga ccctggagtg gctgctgcag aagaaccac 600
agctgggcca ttagccagcc ccgggccccg ggtgcctctg cgtccgtgcc aggcctcctg 660
atgccaaagg cacatccccg tgcctccagt gaccagacca ctgaccacce tgactgtcca 720
aacctgtgac cccaggccag ggaacgggga ggaaaccaa gaaaaccatt ttcagggagc 780

```

```

tcagacgtca caggagggag cgggagcagg atgtggccct ggcctcgcca gagcacctga 840
agaagcaggc cgtgagcgag gctgcgagtg ccctgggcgc cgtttctcac gcatgaatgc 900
ttttccaggc ctctgttgct tcctgcacca cacctgggtg ggtgggagcg tcctctagt 960
cccctagttc tttgtcctgc ctcccagagg gaggaaaaag cccctggggg cttctggctc 1020
cctgagattg ggctctgaga cgagacgggt tccaaggcc ctggtggggc tggagtctca 1080
cctgtttgca tggagaaatg ggctggcccc acagcctcac aggagcagtt tgtgggctgg 1140
tttcccragg aatccagacc ctaaccctg agaatctgga ttttggttg tgagccctgc 1200
ttatttgtag ccgggtctag agggaaccct ctatcagcct caggaaaaca agacctctgt 1260
gcacctcact tttggctcac tgcagccctt gtccttcacc tccacacagg accagctgga 1320
agcagaaaga agaaaggcca atttcacagg gcaccaaca agtatgaaat gtaaatcaga 1380
aatgcagaca cccagacga gagcctcaca ggaggagg ggccccacag gctccccagg 1440
aggctcgtgt ctttgccca gagccagcct tagttgtcc ctgccatcta ctgtctgagg 1500
ccatcgctgc tacactttgt ttttatttgt atttcatact gaagtttcaa maaaaaaaaa 1560
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1620
aaaaaaaaan n 1631

```

<210> 168

<211> 740

<212> DNA

<213> Homo sapiens

<400> 168

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tttttgaatc ggttgtggcg gccgcggcga ggaatggcgg tatttgtgag aggagtcggc 60
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catggctgaa aatagtgtat taacatccac tactgggagg actagcttgg cagactcttc 180
catttttgat tctaaagtta ctgagatttc caaggaaaac ttacttattg gatctacttc 240
atatgtagaa gaagagatgc ctgagattga aacaagagt atattgggtc aagaagctgg 300
aaaacaagaa gaacttataa aagccttaaa ggacattaaa gtgggctttg taaagatgga 360
gtcagtggaa gaatttgaag gtttggaattc tccggaattt gaaatgtatt tgtagtcacg 420
gactttcagg attctgtctt taatgacctc tacaaggctg attgtagagt tattggacca 480
ccagttgtat taaattgttc aaaaaaagga ggcctttgc cattttcatg tcgcccgttg 540
tattgtacaa gtatgatgaa tctagtacta tgctttactg gatttaggaa aaaagaagaa 600
ctagtcagggt tggtgacatt ggtccatcac awgggtggag ttattcgaaa agactttaat 660
tcaaaagkta cmcatttggt ggcaattgta cacaaggaga aaattcaggg ttgctgtgag 720
tctaggtact ccattatgag 740

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<210> 169

<211> 2038

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1490)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1508)

<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1979)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1992)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2010)
<223> n equals a,t,g, or c

<400> 169
tcgacccacg acgtccggcg gcgggaagct ggcggcagcg gtcgggtggcg gtggetgagc 60
agaggacccg gcgggcggcc tcgcgggtca ggacacaatg tttgcacgag gactgaagag 120
gaaatgtgtt ggccacgagg aagacgtgga gggagccctg gccggcttga agacagtgtc 180
ctcatacagc ctgcagcggc agtcgctcct ggacatgtct ctggtgaagt tgcagctttg 240
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agagggggca catcctgtct ctggcttggg ggacggccac acacagggtc cagtttctga 480
cctttgccca gtcacctcag cacaggcacc aaggcacctg cagagcagcg cctgggagat 540
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gctggagact aaaaacccca gctgcatgga agagctgttc tcagacgtgg acagccccta 660
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ccaaatttcc tnaaccttta accaaaaagn ggggtttcct ttggggcaaa aaggccat 2038

<210> 170
 <211> 522
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (471)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (488)
 <223> n equals a,t,g, or c

<400> 170
 ggcacgaggt taatctaagg tgaagcaaac agaaaattgt ggaggttttg ttggtgtgca 60
 actgaggaac atggctcaag aaactaatca cagccaagtg cctatgcttt gttccactgg 120
 ctgtggattt tatggaaacc ctcgtaaaaa tggcatgtgt tcagtatgct ataaagaaca 180
 tcttcaaaga cagaatagta gtaatggtag aataagccca cctgcaacct ctgtcagtag 240
 tctgtctgaa tctttaccag ttcaatgcac agatggcagt gtgccagaag ccagtcagc 300
 attagrcctt acatcttcat ctatgcagcc cagccctgtw tcaaatcagt cacttttattc 360
 agaatctgta gcatcttctc aattggacag tacatctgtg gacaaagcag tacctgaaac 420
 agaagatgtg caggcttcag tatcagacac agcacagcag ccatctgaag ngcaaagcaa 480
 gtctcttnaa aaaccgaaac aaaaaaaga atcgcttggt tt 522

<210> 171
 <211> 1666
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (114)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (1659)
 <223> n equals a,t,g, or c

<400> 171
 gagtccatct tccaccgcgg ccacgagcgc cttccgcatt gccagcgcct gcctggacga 60
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 gaccgcatct cccccacgg ggtcggtgcc tggggatcct gtccgcatcc actgcaacat 180
 cacggagtca taccctgctg tgccccccat ctggctcgggtg gagtctgatg accctaactt 240
 ggctgctgtc ttggagaggc tgggtggacat aaagaaaggg aatactctgc tattgcagca 300
 tctgaagagg atcatctccg acctgtgtaa actctataac ctccctcagc atccagatgt 360
 ggagatgctg gatcaaccct tgccagcaga gcagtgcaca caggaagacg tgtcttcaga 420
 agatgaagat gaggagatgc ctgaggacac agaagactta gatcactatg aaatgaaaga 480
 ggaagagcca gctgagggca agaaatctga agatgatggc attggaaaag aaaacttggc 540

100

```

catcctagag aaaattaaaa agaaccagag gcaagattac ttaaattggtg cagtgtcttg 600
ctcgggtgcag gccactgacc ggctgatgaa ggagctcagg gatataatcc gatcacagag 660
tttcaaaggc ggaaactatg cagtogaact cgtgaatgac agtctgtatg attggaatgt 720
caaactcctc aaagttgacc aggacagcgc ttgacacaac gatctccaga tcctcaaaga 780
gaaagaagga gccgacttca ttctacttaa cttttccttt aaagataact ttccctttga 840
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cttttttttg ttacagtgtg tgatggatgt gtatgaaaaa aatgtatctt tgggaaaaca 1560
attacagttt gttaatttga aaaaaaactc gtgccgaatt caagcagccc ggggggatcca 1620
ctagttctag agcggccgcc accgcggtgg agggccagnt tttgta 1666

```

<210> 172

<211> 438

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (413)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (438)

<223> n equals a,t,g, or c

<400> 172

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gcggaggagg tgtatgccca gctgcaaaaa atgcttcttg agcaacaaga gaagtgcctg 60
ctgttctcca agcagttcat gcaccagggc aacgtggctg agaccaccgc atttgagaag 120
cttgctcagg accgcaagaa acagctggag atcctgcagc tggcccaggc tcagggcctc 180
maccctccca cccaccactt tgagttgaag acattccasa ctgtgaggat cttctcaca 240
ctcaacagca cagaaatgca tctgatcatt gtccggggaa tgaacctccc agcccccca 300
ggggtgactc ccgatgacct ggatgctttt gtgcgggttg agtttacta ccctgactcg 360
gaccaagctc aaaaaagcaa aacagctgtg gtgaacaaca caaactctcc cantttgatc 420
actcttcaac taaactcn 438

```

<210> 173

<211> 2511

<212> DNA

<213> Homo sapiens

<220>

101

<221> misc feature
<222> (12)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (28)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (44)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2456)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2488)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2511)
<223> n equals a,t,g, or c

<400> 173
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gccagattcg gccgagcaag cggaacctct gggaaaagca atctgtggat aaggctcaatt 120
ccccactaa ggtttgagac agttccagaa agaaccgaag ctcaagacgc aggacgagct 180
cagttgtaga gggctaattc gctctgtttt gtatttatgt tgatttacta aattgggttc 240
attatctttt atttttcaat atcccagtaa acccatgtat attatcacta tatttaataa 300
tcacagtcta gagatgttca tggtaaaagt actgcctttg cacaggagcc tgtttctaaa 360
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gtgataccaa ccacatctga agtcaacaga agatccaagt ttaaaattgc ctgcggaatg 480
tgtgcagtat ctagaaaaat gaaccgtagt ttttggtttt ttaaatacag aagtcatggt 540
gtttctgcac ttataataa agcatggaag aaattatctt agtaggcaat tgtaacactt 600
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attattatgt tagctgacag tggtagtgat tttttagggt gggtgttttg tggatttctt 780
tagtagtgat agtagcctga accacatttt agataactca attatgtatg tatgtgcata 840
cacatatata aacacactaa tggtagaatg cttttttatg tgctagacta ttatathtag 900
tagtatgtca ttgtaactag ccaatatcac agcttttgaa aaattaaaaa atcacactat 960
attaatatat catatttgcc aacagaaaca tggcagatag gtatcaatat gttttcaatg 1020
cctgatgacc tataagaaga aagtattgaa aagaagagag attagaactg ttagaaggag 1080
ttgaaaattt ctaaaagaca tagtatttag ttataatta aatgcattct tgaagtccag 1140
tgtgaatttt attaatgcta tcatctcgac caagctcaaa gcctacttat tagaaacaat 1200
gaagttcaca ataggtcata aggtctcttc cttttctaaa attgaaagac aagaaattta 1260

102

```

gtgccaatat tgtacagaca gaaattccat gtatgagtct caacaaagac tacctttggc 1320
taaagtgtcta gaagcagaga agtaaagtga gcaaaatcca gtgttgagga gtcattgacag 1380
tacttttgatc tttatatact ctgaagcatt tcttcaaact tttctacttt tatttgtcat 1440
tgatacctgt agtaagttga caatgtgggtg aaatttcaaa attatatgta acttctacta 1500
gttttacttt ccccccaag tcttttttaa ctcattgattt ttacacacac aatccagaac 1560
ttattatata gcctctaagt ctttattctt cacagtagat aatgaaagag tcctccagtg 1620
tcttgccaaa atgttctagt atagctggat acatacagtg gagttctata aactcatacc 1680
tcagtggact taaccaaaat tgtgttagtc tcaattccta ccacactgag ggagcctccc 1740
aaataactat tttcttatct gcagtattcc tccagaagag ctaaccaggg cagggctggc 1800
atgagaagtg acatctgcgt tacaaagtct atcttctca taagtctgta aagagcaatt 1860
gaatcttcta gcttttagca acctaagcca aaggaaggaa agccacgaag aatgcagaag 1920
tcaaacctc atgacaaagt aggcacaagt ctacaataag ctaaatcaga atttataaat 1980
acaagtgtcc caggtagcat tgactcccgat cattggagtg aaatggatca aagtttgaat 2040
taaggcctat ggtaaggtaa cattgctttg ttgtactttt gaacaagagc tcctcctgat 2100
cactattaca tttttttcta gaaaatctaa agttcagaag agaattgtatc actgctgact 2160
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catccacaat aatggaatt ccttcctgca aaaaaaaaaa aaaaaagggc ggccgntcta 2460
gaggatccag gcttacgtac gcgtgccngc gacgtccata gccccttcta n 2511

```

<210> 174

<211> 230

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (4)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (19)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (227)

<223> n equals a,t,g, or c

<400> 174

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tccttcccag tgggtacttnt actaaattgt tgtcttgttt ttatttttta aataaaactga 60
caaatgacaa aatgggtgagc ttatgatgtt tacataaaag ttctataagc tgtgtatata 120
gttttttatg taaaatatta aaagactatg atgatgacat ttaaaaaaaaaa aaaaaaaaaa 180
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaanggg 230

```

<210> 175

<211> 1191

<212> DNA

103

<213> Homo sapiens

<220>

<221> misc feature

<222> (44)

<223> n equals a,t,g, or c

<400> 175

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ggcagagcgg caccagatgt gagccaccat gcctgggtgt ctcnttcatt ctttaggcag 60
ttcattgtca cttccttcca ttggtaaaca tgtaaattat agtcgcatga tttagaat 120
tactgaccaa agtcataata atagttaaca gtacaaggaa ctattttkgt ataatgggtt 180
atttaataca gtatacatta tctttcatat actttgttac aatgttaaaa aaacttcatt 240
tttcataata taggaaataa agttggaaac aactctgggtg ggaatacttc agatagagca 300
agaaaagcatt cacagcaagg cctataatca gtaagatgtg tgaaaagttg ggtagccaca 360
ggagggtgtt attaaggata tgattccatt tatatagcta tttctattgc ataaccagga 420
cagtttttatt gttttgaggt caatgttctt ttaaaatttg attttctgta agaagaggct 480
ttttggccca gaaagcctta cttattttac awcttccagt ttgtccatcc catgagttag 540
agtctgtctt gactctgcaa gctagaatca aagaattatg aaagtaagat catttagatt 600
tgaccaaggg caccattaaa tgggtgtcagg ttttaggaag cagacgggtg tataaaaaga 660
aaatgaacaa agatttcact tattggggat caggcataac tggatgcctg gattgtcctg 720
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gcccttttaa ttgcaaagga gaaaaaatg gagacacttg tgaaaccttg cattctgagt 1140
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```

<210> 176

<211> 1499

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1462)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1476)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1495)

<223> n equals a,t,g, or c

<400> 176

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gccttctccc gcctccctcg gccttagcca tggcgagtag cggcggtgct ggggcggcgg 60

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104

cggcggccgc ggcggcgaat ctgaatgcgg tgcgggagac catggamggc tgctgaaaat 120
atgacaagct gactttctgg agaaattctg atgagatatg tcaagctctg caagrpggtt 180
tgaagattgc attgtagttg agaatgtaca wtgaaattwc tgcattgcagc agttagagaa 240
aattttmctt tttaaaagaa ttataaaacc atagctttat aaatcagtgg aaagtggctt 300
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atgctttggc attgctatgk tcatatttat gtattcctta tttatagctc tgatagcttt 420
aattttctaa gcagtctgtc tatcagatgt gcacatctgc tgtgccaggt tgaagtatat 480
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acaggatttc agccaccact tgtgaatttt tatttagatt cattatgtat atcagaatct 660
tgttttttga aataagagca tggaaaacat ttcttgtaat ctactcttga acaaagaata 720
tttagttttt caaacagttt gttgggcagc taatagtgtg aaccaggtca tttttgtatt 780
gagtaaaaaa atcaaacctt gagaaacttg gattttaaaa gtaatgacaa tgcttaggtt 840
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cattattctt gcctttaaaa ttttaactca tcaaagtga gattagaaat aaattttagg 1380
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<210> 177

<211> 1538

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (50)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (727)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1218)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1487)

<223> n equals a,t,g, or c

<400> 177

105

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tgtaccggga cctgcagccc gtgggctcgg gcgcctacgg cgcggtgtgn tcgtccgtgg 60
acggcgccacc gscgctaagg tggccatcaa gaakctgtat cgkcccttcc agtccgagct 120
gttcgccaag cgcgcctacc gcgagctcgg cctgctcaag cacatgcgcc acgagaacgt 180
gatcggkctg ctggacgtat tcactcctga tgagaccctg gatgacttca cggactttta 240
cctgggtgatg ccgttcatgg gcaccgacct gggcaagctc atgaaacatg rgaagctagg 300
cgaggaccgg atccagttcc tcgtgtacca gatgstgaag ggytgaggat atatccacgc 360
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gctgaagatc ctggacttcg gcctggccag gcaggcagac agtgagatga ctgggtacgt 480
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atgatgactc ctttgacgac gttgaccgca cactggatga atggaagcgt gttacttaca 960
aagagggtgct cagcttcaag cctccccggc agctgggggc caggggtctcc aaggagacgc 1020
ctctgtgaag atctctgggc tccggggtgg cagtggaggc caccttcacc ttccacctga 1080
gaggggactc tcgttgccac cttgaccttg gctggggctt gcatcccaag gcatccatca 1140
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cccatcatgg aggagcanct gaactttctg gacaagacct ctggccgacc tggggatggc 1260
ctctgatycc tggagcagtg gccacttg cgggtgctct cagaaacctc agagctggtg 1320
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cagaggggtg gcgcagggca ccaactcagg gacatccctc ctctggggc acgtcagtg 1440
accttcctgc acccccagcc tggaatgtaa atcagctgtg tggtgcnccg gtggctggaa 1500
ggaaatagac cctttttagt ctccctgaaa aaaaaaaa 1538

```

<210> 178

<211> 896

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (194)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (825)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (828)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (831)

<223> n equals a,t,g, or c

106

<400> 178

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ggacgcgtgg gctgcacctc accttgtcca cgtaccagcg caatacctgg ggtgacttct 60
tagaggccat actgcctctg gcagtgcagg ctgcaatgga agaaaatgtg gagtttcgga 120
ggggctctgcc ccgagacttc atggattaca tgggggcca gcattcagat tctaaggatc 180
cgggaaaaaa ccgntttcat ggagaagggtg cgggtcttgg ttgcccgcct gggacacttt 240
gctcctgttg atgctgtggc cgaccagcga gccaaagact tcattcacga ttctctgcc 300
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caggatggga tagctcggct ggtgggtgag gggggccatt tgtttctcta ttacacagt 480
gaaaactccc gtgtgtatca tctggaagaa cccaagtgtc tggaaatata ccccagcaa 540
gctgatgcca tggaaactgtt gcttgggttct tatccagagt ttgtgagagt gggggacctg 600
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agtagtgatt ctccgctgcc actgctaact tttttttttt ttttttttct cttaaactca 780
agttcttacc ttgataagca tcagtgtgct cacatttacc tttancantg ntcagtgtca 840
caaacctcgg aaggctctcta ggaagaacca tctcatctag gtacaaaagg gaaagg 896

```

<210> 179

<211> 568

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (67)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (469)

<223> n equals a,t,g, or c

<400> 179

```

ttatcttaga tttctagtta tttatatatt aactttttgt ttattcagaa tcattttcct 60
gtttgtngga atattttctaa gagccttggg aaaatctcga gtaaaatttt aaatgaaatt 120
tgtatagtgt tctgcctctt tccaaaggta tttctcaaaa ttgggaattg ttttattatt 180
gaagttgaat gacttcaggg gaactctaaa atgcaagatg ggaagcttct gtttggtttt 240
ttcctttccc tttggttaagg tcttttgctt cccatccctc tgaccacact ttgtgctgtc 300
tgttgtccag tctgctctcc kgatccctaa rgakgtttct tatctaggct gccatttatg 360
tgggtaaaag acaaggtaga aaatactctt ctgtatcttg tatcaagggt taatctaattg 420
tcttcacac tttgttttga ratattttgg aatgttatcm acaattatna tagatggagc 480
atgtatgtct taggtttggg gttaatgttt aacatgcatt atcttattca atcctcacag 540
cagtcataaa atgtaggtgt tttagagg 568

```

<210> 180

<211> 428

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (405)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (413)

<223> n equals a,t,g, or c

<400> 180

```

aaacacctat ggaaataatt ttgttttttt ttttttaaaa aggaatgaga tcatgtcctt 60
tgcagggaca tggatgaagc tggaaccatt atcctcagca aactaacaga ggagcaggaa 120
accaaaccac acatgtttctc acttgtaagc ggaactgaac aatgagaaca cacggacaca 180
gggatgagat caacacacac tggggcctga tgcaggggcc gtagcgggga gagcatcagg 240
ataactagct aatgcatgtg gggccttaata cctaggtgat aggttgatag gtgcagcaaa 300
ccaccatggg acacgtttac ctatgtaaca aaccgcacat cctgcacttg tatccagaac 360
ttwaaatatt ttaaaaayct ttagagawtm caaaaaaaaaa ggtnnttcaa tgnntcccca 420
ttaaattg                                     428

```

<210> 181

<211> 2901

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (10)

<223> n equals a,t,g, or c

<400> 181

```

agagaaagcn ttccattgaa aggtagatac tttgaggagt aaaaagactt ctttgaatgc 60
tggtaaacac cgcattttatt ttgtgtatgc agtttgattt gcacatgtat aaatggagat 120
gctttttcatt tttgttttggga ctgggtttgt gtcactgtc attacagttt gctttttttgt 180
gtgttttgcgt tgcgttttggga gatattagtc agtttcttta gtgatatttg tttccttgat 240
gtgccttttc gtttttcttt ggggtttttg gaatctggat gctgttgaag ggcaatagca 300
gactcctcca gctaagagac aggacatgtt cttgagccac tgtagctgtt gaagctggac 360
accagacgct ccctataacc cccccgccag gccatagcgt gwatgcawgt gcacttccac 420
ccacagagga ggggtgtgaag ccttgagaac ctcaagaaag ggctggattc tgccatacct 480
ttgggtctac cttgggactg ctgggttgcca acgtgtcaac cagcctgtgt tccctgccac 540
ccacgcactt gctgagggtgt ggctgargca gaatcatgtg aatgggtgca tccaaggagt 600
tcagggccct gcttgagaga gaaatamttt agcatcatga aagggaaaga acgtgcaccc 660
cttttttgtt tcttttagtga atgcaagatt taataaaaagt gaataatgag cttccccttt 720
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aaaaattctt gatttaaaaa gaaaagtcta tttgtttaac gacaggctct gttgtatgtg 960
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tttattctaa tccatcccat ccctgtggag ctgcagagca tcttcatgtg agtagacgga 1080
tggaataaaa tagattcatg ctcathtagg aagctgggag tttcgtgaag ctgaggggtga 1140
gttcctgtga ttctgttctg cttcaacaaa aagtgggaga ccaagttttt atagcaaaaag 1200
accaaattag ctgtagagtc ttgaatgcag aaaaaatta ccctagcttt cttagcactt 1260

```


108

```

agggttttgt gaggattcag tgttttagcac agtgcttggc catagtaagc cctagtaaat 1320
gttaaataatt gttatttagtg tttcgtaaaa cttgagaaat agagctgagc tcattccctt 1380
cctgttgatt caaaaaataat acctacatga aaacatgatt ccaagttgat tgaatgttgt 1440
aggaattact ggtttagagt agcccagttc tcggcctacc ctgctggttg ggatcttact 1500
gtattcttga atgcactggg ttgaaaatat gccagacttc agcccccaag gaaacaaggc 1560
tgcaagaatt tatgaactcc agctggaaaa ggtaaagggtg acctttggct agccacatac 1620
tggaaccttac cccactgacg tctttcagaa cattccaagg gttttcctca aggaacattt 1680
ttgagctaga aattaaatg ggttctctgg cagactgcac cccttgagtc aaagttaaca 1740
gtattccttt gaatgcaata atagaggctt ttctgcgtta agggagaagg aatgaccaat 1800
tgaacttaca cattccccag gcaggctcct ttgccggccc ctacaggctg ggggtggccc 1860
tcctgtcctc agggatcaga ctcccagact ggtagttct gcatgtttcc atcaaattaa 1920
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ggggcagggg ttttggcctc tcagaacagc tcctagaggc tgctcatgac tgaatgtttt 2040
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tctggataga ttgcagggtg ggaatttgct ggagtttggg gacttcgtca aattcctttg 2220
gattctgttc cgccaaatca gcagtctcgt cctgtggatg cagtgactgg aatttcccat 2280
ctgcaaagca tctctgtagc ccagattttg tggagcctta agacactccc tcaatgccac 2340
cctgacccca cggctggaga accctgtgct tatgtggtgg gcagggccac tgttgatgga 2400
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caaaggagat ggtgacgtcc cttccactgt agttgtgtc acaaccttga cgtctttaag 2640
ctaattggcg tttgcatctg tgtcttcaaa cagatcctgg ttacagccat tttgtgtgat 2700
tcaattcggg ggtaagtaa tgcaggattc tgcaaacaag gtgtcgccgt ccaaattgtac 2760
tgtcttgga tagagagcac tgctttgttt tccactgttg tagagaaaac tagggagaac 2820
tttatttttc aataaacttt tcttgtgtga aaaaaaaaaa aaaaaaactc gagggggtgc 2880
ccgtacccaa ttcgccttat c 2901

```

<210> 182

<211> 290

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (276)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (286)

<223> n equals a,t,g, or c

<400> 182

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taatttaggt gacactatag aaggtagcc tgcaggtagc ggtagcgaat tcccgggtcg 60
accacgcgt ccgataaaac atgattttgt tttctaccct tcaaggtaaa cattaaaaat 120
aargtggtac ttgtgtwctt gtwcataaaa ccaaaattat akttgggaaa aaaataaatt 180
tatatatgaa aatgtcaaaa tcatttttaa agtattatth tcaataaaaa tggagaagct 240
ggtgaaaarw maaaaaaaaa aaaaaaaaaa aaggngngccc cttttngggg 290

```

109

<210> 183
 <211> 641
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (14)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (43)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (55)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (68)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (80)
 <223> n equals a,t,g, or c

<400> 183
 gttcaggaaa cccncaaggg ggggggagtc caaacgggat gcnaggggaa gcttnccttt 60
 tcccagcnaa tttgtgttcn ggtttgaaaa gacccaccac aaagctttty ctattttctg 120
 atttaaaagt cgcttttgaa tatgaccatg agaaaccaag aaatgctgct tgtgtggtgc 180
 tctgcttcct gaggatttgg ctggaagggg attctccgct ggcacatggg agaaggccat 240
 cttctgtgtc ggtgctgtga tctgccttgt tctcacttgc tgaggataag ggcatacacg 300
 ctgctcctcg ctttcttggt gcccgacttc gtactaagca gctcaggagc agtcactcag 360
 acccaaagt cttgactgtg ttgtttttta tctactgtgac ccttaaagta caggccaagt 420
 gttgtcaaac accttggtta aaacagtgga gggatgatggg taaagcagta gagggccctc 480
 aaccacaca ctggctgaaa ctgccaccaa ctgccacgat gaaccaact gctgtttatg 540
 cccccatttt cctttttttg tatctacacc cacacgattc ccaatgttgg atatttctac 600
 atgaataaag caaggatcag tgccctttat gtaaaaaaaaa a 641

<210> 184
 <211> 522
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (514)

<223> n equals a,t,g, or c

<400> 184

```
caccacgtgg ctgtgaaaat gacaaagcat ggtcgtgagc cactatgcc ggccggattt 60
gcccttatta atggttattt cttgtgaaag tttctttttg cttttgcatt ctttttattc 120
tgtttattcc cccatgcctc acccaaagag ttgcacggtc aattggcccg tgaaggggac 180
gcctactttc aaacaaggca gacaggacac gacaggacgg cggctcatag cacagacttt 240
ggattgcagt ggatgggacc agatcctggc tccacttcts gcyagctgtg tggccctggg 300
caagctgctt aacctctctg ggcctcagtt tctccccctg taaactgggg gatgtgaaca 360
gcgcctgcct ccgagtccta aggattggga gtagtcgtgt aaagtgtca ggtccacagg 420
ccatcaatac taatagttaa aaattattct tagaatcttg cttccctcag ctccctgaaa 480
ggccactaag gcaccccgat tgcagaggcc aatnggtccg gg 522
```

<210> 185

<211> 735

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (197)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (293)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (386)

<223> n equals a,t,g, or c

<400> 185

```
agtataacca tttaggtgcc agatttgata atcaccagck gctcatksar gtcctatgtt 60
gcaaagttac tcttacscct tttttacatt rcttgataaa ggcaatsttt aattayrtat 120
ttyctrtaaa ctagctggta gagttcatac cttaaagtcag taaataatgt taagaatttt 180
ttccagctga gcaaatngta tgtatctagt tgtaagaaat caagaagagg atataaaata 240
taatcaggat gtggactcta aaacggaata acctctatgt cctgtaactt ttntcactyg 300
taataatata gcattctcac cctrtaaat ggaaatttar agcaccytta aattccggaa 360
taaaattgct atttggatwg aaaaanccct taggcaacat ttattgaata ttaggaaata 420
acttttatgg gattagaatc cattttttat agaaacccaa tttaaaagta tacatatttt 480
aatataagtg ttgtgataat acagtaacca aaattgaaca cacagtttta wagcttttta 540
tatttagtag cagttgaata tatatggcat gttttacata gattaatttt actatttttc 600
tttrtttaaa maagagracc aaattgaaag ccracagata ctgcaratga ctgggatttt 660
tgtttctgyc ttatcttttt gtgttttttt tctgaataaa atattcagag gaaatgcttt 720
tacagaaaaa aaaaaa 735
```

<210> 186

<211> 785

<212> DNA

<213> Homo sapiens

<400> 186

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aattcggcac gagagcaagc ggaaccaggt atcgtacgtg cggccagccg agccggcggt 60
tctggcccg tccaaggaac gggtcggcta cagggaggga cccaccgtag agactaagag 120
aattcagcct cagccccag atgaagatgg ggatcacagt gacaaagaag atgaacagcc 180
tcaagtgggtg gttttaaaaa agggagacct gtcagttgaa gaagtcatga aaattaaagc 240
agaaataaag gctgccaaag cagatgaaga accaactcca gccgatggaa gaatcatata 300
tcgaaaacca gtcaagcatc cctcagatga aaaatattca ggtttaacag caagtcataa 360
aaagaagaag ccaaatgaag atgaagtaaa tcaggactcg gtcaaaaaga actcacaaaa 420
acaaattaaa aatagtagcc tcctttcttt tgacaacgaa gatgaaaatg agtaagtgt 480
aatattttga atttagtcta ctttgaaagt atatggagtg ttcattaaaa tcacattttt 540
tcctattata aagatactac aagttcttta tagaaagttt aggaaataga gaaaaaaatt 600
taataaacta catctattca tcaatacccc tctgacttaa aatgccaaact ctatagaaat 660
tagctagtat taacattttg ttatttcctt tgtgtggttg tatatatatg taaattatat 720
ttttaagcaa aatacatttt ttgtgtgtaa acaaaatttt ataaatacaa ctgtattgca 780
aaaaa 785

```

<210> 187

<211> 1679

<212> DNA

<213> Homo sapiens

<400> 187

```

gatctttagg tttttcctat agaaaacatt ctctctccat cagtagccct ttatttgata 60
ttcagaagtg gaaagctttt tcattctcca gtagaacttt taaaaattgt tacagatacc 120
tagctcttca cagatatcat gtattgtaaa cagtcagtgt tottaatttt atttctctta 180
tttgagtgca taattatcct aataatccca aagacactga caactcaagg aacagcagta 240
cagtactatt agaagttaag tatgttggtg ttatttcaca ttccatttaa ttgtggataa 300
atgttagaca tctgttgaaa taagctcata tgggtggaaac gacaactata ttatgaatta 360
ttttcagaaa tggatctttg aatagcagat caggatttaa ataataaaat tatctatgaa 420
tcacttttat ggtcatacat atatgatata aatccagagt tattgggtgca gaaatggcta 480
cccagagact tggtaaatTT gccttgggtt cttatgttaa atgtattgtg cttcccttct 540
gtctctagaa tgtggctctt cagaagacag acaatcgaca tttaaatttt tccaaacaat 600
gaaaaactaa attaaaaaca ttgcttgata ttccatttaa aattgcacct tgcttaaggt 660
ttactgaata actgaaatgt cagcaattta aaataaattc aattgtgtga taaaatatct 720
cacctataat agaagaaaag gaaaatcata ttatttggca attttgcagc attgtggttg 780
cctaacaggt atatccagca gatgagaaac agtatgaaag gattgtatta acatggtaag 840
ttttgcccta aggaaaacga tcttgcattc tggattcttg cagcaaagtc tcagataact 900
aatacgtttt ctgtktttat catctgktct atgattcggc ttcactttgt gtggktattg 960
aattatgtaa cagagatttg gktttcccaa aatgktatca catttgaaac tatgattgct 1020
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taaaatcatc aatacatgaa agaaaaagga tggaaactat gtccctcagtt ttacttctac 1140
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gttaactttt gctgcaatct attgtacatt tgcaattttc tgtgttagta aacttagcag 1440
aatctggtta wttattttwg tgtaggctta atgttccactg aaagataagt caattactgy 1500
tagtaaaaaa ttaagggtact ctactgcag agatttaagc ctgggcctaa tgtgctgtat 1560
tatgaagcct tgtgactgaa aaatatgttt acatatgttg tctatttttt taataaactt 1620

```

112

ttatagctgg tctatttgcg cagtaaaaaa aaaaaaaaaa aaaaaaaaaa aaactcgag 1679

<210> 188

<211> 780

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (289)

<223> n equals a,t,g, or c

<400> 188

cggtgggctc gcgttgaggc tgcgggtcatg gagggagcag gagctggatc cggcttccgg 60
aaggagctgg tgagcaggct gctgcacctg cacttcaagg atgacaagac caaagtgagc 120
ggggacgcgc tgcagctcat ggtggagttg ctgaaggctc tcgttgtgga agcagcagtc 180
cgcggcgtgc ggcaggccca ggcagaagac gcgctccgtg tggacgtgga ccagctggag 240
aaggtgcttc gcagctgctc tggacttcta gggatctcag ccgtggckna ggccaccccc 300
agaggagccc ctggtccaca gaagcaggcc ttgtgtttcc agcggcctct gataagaggc 360
aggaaggam ctgaaggatt tggarttgat tcaaacaaga tctctgggag tctccagcct 420
gtgcagaagg ggcaggactg cagtgcactg cgggccttgg agtgtccagt ggggacactg 480
gtgtgggaag gggcagcacc tggggagtcc ctgcctctcc tccctgggac aatagtgtgc 540
atgccacccg gggctctaca ggcagggtgt gggaaaggcc tggccagcag gtagcctgtg 600
tgtttgacaa acagcagctg gcagcgtgc ctcttgccca cattcctgcc acccgacatc 660
aaagctggcg tgtgaccttt ccagccatgc gatattcccc ttggaagatg cttccccagg 720
ctataaattt gttctcacia agcaacatca ataaatcaaa actgtctcty ccaaaaaaaaa 780

<210> 189

<211> 533

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (485)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (498)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (522)

<223> n equals a,t,g, or c

<400> 189

ggtcccttta aggtttgctt ctacagcccg tggacttttag cctaaacacg gacccgcgaa 60
gctggccttta tttgtccatg tctcgacag agcctgggaa gctgccagtg agatttcaga 120
gaccaagagc gcgaaggggc gggcgatgtg gcaatccgtc tgggatgtga aaagcgtgga 180

113

```

gcgcatttag aggcattcga cgaaaacaca ggaaatcact cctctcccgc tcttgggccc 240
cgctgccact ggggcagagg actgggaacc gcggcagcgg gataagtggc ccagccagag 300
agcgcagctc ccgcgcccgg tcttgccctg cgaaccacgc ggccccctgg gctgaagctg 360
ctccggccat ggccctcggc ccgcgcccgg cccargggtg gctgtcccct gcttgctggg 420
ctcctccctg gtacattgcc tcttcccggg cacaatttac tccctgaaaa aaaggccctt 480
tgttnaacct actgtggnta accgcctttc aaaaactaaa anttgctggg gaa 533

```

<210> 190

<211> 602

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (548)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (583)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (590)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (600)

<223> n equals a,t,g, or c

<400> 190

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ttatcacatt aatgtgttca ttttgtaagt aagagtactc aattttaaata gatcttactt 120
taaaagtggc ctagtttgca gtgcccagca ggacactgac agtcacagct gtgtgacttt 180
ttgtgggtta cttaatTTTT ttgagcctcc ttttctcttc tattcaatga ggataatagg 240
gcctacctca taggattatw atgcattccc ctctgttaat gcacgtaaag tttttacttg 300
gaaaactaac tcaccattta acaaccattc taagcaccat agaatatatt ttgtttcaca 360
aatttggtat tcattcagaa taagtatttg aaaagtgagt aaattctatg caattatagt 420
tattaaatga cttataaact gtgtttctct tccacttctt gctacattta atcttctagg 480
tgttcagata tctttggaga ttataggcag caataaagct aaggcagcta acctttaaca 540
ttcttggngt caagctaata ttttggtgaa aggggaattct tngggttctn aaaaaacttn 600
ga 602

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<210> 191

<211> 858

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature
 <222> (772)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (801)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (814)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (815)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (852)
 <223> n equals a,t,g, or c

<400> 191
 cttggctcaa acaatatattt ccctataaca aaggcaatag gacacaaaat tcacatcctg 60
 ctgggccttt ttcatcaag tcagggatgat ataaaaacat tggaagtctt ttcaccaaac 120
 cctgacttta ttgaatgcta gtagaagatg tagaattaga gacatctgat ttgtttatca 180
 ccttagcaga aaaaccacag tccaaaagac aagcaaatta agaatggagc ttaaccatgc 240
 ctccattggg aagtctagac tttgagccag gtacagtaag aaaaattagc ctctgattca 300
 ttaagtttgc cacatgactt attttgatat tttggatata ttaactcact taggagaatt 360
 cagaaaagaa tgggtgatta aagttcatta cagctgaata aatgtgtcta aaacagactc 420
 ttgtattctg aaagtacagt ctacaactga taaaacctta tgattctttt ctccccatt 480
 atgcccctat atatatcaag atttgggtac tttatttttag tagaaaatat atatctttta 540
 catatgtatg tatttataaa tgcataagata tatgtataaa aattttgtaag cgtagcggc 600
 attaattcac caatgcattt ggacaacttg atgtaactga ctttatttta tgtgactata 660
 ataaaaagca taattttctc aaaaaaaaaa aaaaaaaaaa aaaaaagggc ggccgctcta 720
 gaggatccaa gcttacgtac gcgtgcatgc gacgtcatag ctcttctata gngtcaccta 780
 aattcaattc actggccgt ngttttacaa cgtnttgact gggaaaaccc tggcgttacc 840
 caacttaac gncttgca 858

<210> 192
 <211> 667
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (82)
 <223> n equals a,t,g, or c

115

<220>

<221> misc feature

<222> (234)

<223> n equals a,t,g, or c

<400> 192

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gcgggggaag cggggctgta gctgggcagg gagagggcgg acgaaatcgg tagcgatctc 60
ggctgcggcg ctgcccactt gncccgcccc gcggggcgcg ccctgaccct tcattcttgg 120
gcaggctcga gggcgcgcg acggttgagg ttctggggcc tcaaactcct gggccttgac 180
cgggcaggcc gcgtctcccc ggggtgtgagt ccaccgggac cgggccgccc cctnaagcgc 240
gkgcgccaca gaagcggcgg cgccgaaga cgcgctcctg gtcggcccg acagcctcgc 300
ttggccgcca gttcttctgc agccgaaggc ggttggttctt ttaaagaatt attgaagacg 360
aaggtttttt tctttttatt tttttaatgg ytttacagaa tcttaaataa aatacagttt 420
gacatgacgg caaaaaatgt tggtttgact tccacaaatg cagaagtaag aggatttata 480
gatcagaatc tcagtccaac aaaaggcaac atttcatttg ttgcatttcc agtttccaat 540
accaactcac ctacaaagat tttaccacaaa accttaggac caataaatgt gaatgttgga 600
ccccaaatgt gatagaaaac gggctagaaa atttatagac tctgattttt cagaaagtaa 660
acgaagc 667
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<210> 193

<211> 537

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (85)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (511)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (537)

<223> n equals a,t,g, or c

<400> 193

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gttaccgctc tataccggca gcagccgcgg agagcatgcc ccgccccgt ggagcccacc 60
ccgggcgggt aacctcgggt ctcantcccg ggctgtgacc ctccccgagg ccccgcccc 120
acggcgaagg cccggggcag ttaacccttc tcttgctgcg gcagagtccg caccggggca 180
ggcccatctc agaattaacg ctttgatggc atcaccgctg cgggaatccc tggggatggg 240
gttctccacc gtcaagacct ttgagccgcc tgagcgacta actcctgcgc ccctgagggg 300
acattttatt cagaaattaa atcattcaga gttccagcac tgcgggggt catcgggctc 360
tgtccaccgc catagcctag cattgtcacc aacggagcca trgagggacc tcggcccaag 420
ctggggcctc ttcattgtcg aaaaggcctc ttgccagacc aggatctgtg ggcgcgccca 480
ggctggagga ctagggcggt ggcagtgcca ngtgagtgc catggctgtg ggtggtn 537
```

<210> 194

116

<211> 400
 <212> DNA
 <213> Homo sapiens

<400> 194
 tctaactata ttaaaaaatt tctgtatggg gatatcatta ggaaggggat cagtaccttg 60
 tctgtwatgt gtctactaag caaaacccaa actgcagcac cccctgtgg tacactgcac 120
 ctccagtttg tactgggggt tgttgccag gctataggca tctttcacag gtccttgctt 180
 agcatcccaa gtactgtgaa tacatgttga ttcttttaaa agacctggat tccaactcaa 240
 ataaatcaca tcataatact ggcagagatc atcccaggaa atccaaaata ttccgttgct 300
 tattttctga gctgttcggg gatcaaagtt taaatacttt tgcaactctg gaggccagtt 360
 ttttacatca ttttcactgt atcttccttt ccaacgtaac 400

<210> 195
 <211> 431
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (411)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (417)
 <223> n equals a,t,g, or c

<400> 195
 cgcggtggcg gacgcgtggg gtgaattttc agccctcaga gcagaaaatg agaaaataaa 60
 actcgaacta catcagttaa aacaacaagt aatggatgaa gtgatcaaag tccgaacaga 120
 taccaaatta gacttcaacc tagaaaagag cagagtaaaa gaattgtatt cattgaacga 180
 aaagaagctg ctggaattga gaacagaaat agtggcattg catgcccagc aagatcgggc 240
 ccttaccag acagacagga agatcgaaac tgaggttgct ggccctcaaaa ccatgcttga 300
 gtcacacaag cttgataata ttaaataatt agcaggggtc atwtttacst gcytaacagt 360
 agctctggga ttttatcgcc tgtggatcta ataaagtgtc tattttaaagg ngaaaaanaa 420
 aaaaaaaaaag g 431

<210> 196
 <211> 417
 <212> DNA
 <213> Homo sapiens

<400> 196
 tttcactttc tacttttttc attttgttct gttcgaattt tttataagta tgtattactt 60
 ttgtaatcag aattttttaga aagtattttg ctgatttaaa ggcttaggca tgttcaaacg 120
 cctgcaaaac tacttatcac tcagcttttag tttttcta at ccaagaaggc agggcagtta 180
 accttttttg tgccaatgtg aaatgtaaat gattttatgt ttttcctgct ttgtggatga 240
 araatatctt tgagtggtag ttttttgaca ggtagaccat gtcttatctt gtttcaaaat 300
 aagtatttct gattttgtaa aatgaaatat aaaatatgtc tcagatcttc caattaatta 360
 gtaaggattc atccttaatc cttgctagtt taagcctgcc taagtcactt actaaaa 417

117

<210> 197
 <211> 734
 <212> DNA
 <213> Homo sapiens

<400> 197
 agacatattg aggtgcctgc cttgtggag tattcatttt atgctgcccc agatatcatt 60
 taatttagac ttaacaagta tttccttgtg attatattac tctgtccttg ttaataaagt 120
 gctgctgtgt ttgactctga acatactacc aaaacttctt caaagagttt tttatgaaag 180
 actttcctcc tttaacaagar agaaatrugg tctgccttt ctgttttagta aaagcagaat 240
 ttgcagtggc atctaaagag acttttttaa ataaaaatta tgtattgtgg cataatcctt 300
 tttttgagct ctacagagaa cagtcttttg gtaatagtgg caggatttta ttccttctga 360
 atatataccc cattatagga ataactgtta cttatttagg attccatcat tgaaaatttt 420
 gacccaaggc acagcagtga aatttatagt tcycaattta gttgtcatta ttgacaggca 480
 ttgggtattat tagtcattgc taagcaacta aaacttcac agttcaaata agttttaatt 540
 gtcaaatgaa gtataaacac atgaactttc tagaaatatt tcctcttttg gataggctct 600
 taaccagttc atatataac tttgtcaaat atatggatgt gtatgtgtac atttataaga 660
 accagtatgg atacatccat tcactgtggg acattttaaa ataaaatatt ttagcagtga 720
 atatggaaaa aaaa 734

<210> 198
 <211> 606
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (144)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (155)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (598)
 <223> n equals a,t,g, or c

<400> 198
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 tcttccagtg ttttctcatg cmaaatttyc tyctarcatg tgataatgag taaactaaaa 120
 ctatttycag cttttcctca attnacattt tggngtata cttcagagtg atgttatcta 180
 agtttaagta gtttaagtat gttaaagtgt gatcttttac accacatcac agtgaacaca 240
 ctggggagat gtgctttttt ggaaaactca aagggtgctag ctccctgatt caaagaaata 300
 tttctcatgt ttgttcattc tagtttatat ttcatattaa aatcctttag gttaagttta 360
 agctttttta aagttagtta aaagaattga gacacaatac taatactgta ggaattgggtg 420
 aggccttgac ttaaaacttt ctttgtactg tgatttcctt ttgggtgtat tttgctaagt 480
 gaaacttggt aaattttttg ttaactaaat ttttttctta aaataaagac tttttcacia 540

118

wraaaaaaaaaa aaaaaaaaaa actcgagggg gggcccgtac ccaatcgctt gtgatgtntc 600
gtatac 606

<210> 199
<211> 373
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (251)
<223> n equals a,t,g, or c

<400> 199
catcttgagg gtcaaataat agtaggaaaa gtccagcaga tactgaattt tctgatgagt 60
gtactactgc agaaagagta ctgatgaaat ctccatctcc agcattacac ccacctcaga 120
agtacaaaga tagaggaatt ttacatccta aacgaggtag tgaggaccga tcagatcagt 180
cttctctgaa atctacagac agcagtagtt acccaagtcc ttgtgctagt ccttctcctc 240
catcctcagg naaagggctc aaaatctcct tcrccaagac caaacatgcc tgttcgatac 300
ttcataatga agagttagaa tttgagaaac cttgaaattt ctcaacagaa gggtatcttg 360
gctacaacty cta 373

<210> 200
<211> 3652
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (306)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1412)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1519)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2101)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2102)
<223> n equals a,t,g, or c

<400> 200

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acgagctgat gtctcccgga ggaatctgca attgcataat ttagttgggt gcttgtctac 60
tgtctctctc tttggcaaga atgaaagctc tatgagcaaa cagaccttgt ctgccttatg 120
atccattttta ttactagagc ctaggactgt taaattcatt aataaagtct ttccatcact 180
ttttgttctt tatattcctt tactcaattg atattcagca tgtgcagaac agttcttttc 240
caaggctgca taaaagtttt ggaatgaggg acataaataa tatccttcta ccaataaatg 300
ctatcngtta taaaatagtt tttattttat aatcactgaa tatgtcaaaa ctttacagtt 360
caggcctttt gaatcaaag caaaatcaaa tatgaaaagg ttaatgatct tgtccactaa 420
aattgtagtt tgccatacag gaaaatagac tcttaaaaaa gataaaaaaa aaaaaatcat 480
tcttaaggaa acatattaat aagacattta aaaaggctaa gatctttaat gtgaaaaata 540
ataagataaa gatgacaacc actgaagaga agaaaaaacg ttttatgttt tttctaaatg 600
tgtgtaaaaa caaatctttg tacctacca aatgacactt ttttcaaaga aaggtatcaa 660
atgtgtatac tttaacacac agcccttctt tgtgtaaata tataaggaaat ccttaaagga 720
gcataaaaca atttacttag aaattctata cttaaactta ttcaaaggaa ataattaaag 780
gtgtgtaaat aagatatgca tagcattgct ctaaagtca aatagtaggg aactaggtaa 840
ataagatata tctatttagg gaattagtca agtaagatat acctatttag ctaattccat 900
gtagccatca aaaggatacc atagaacaga acttattgat gtgaaaagat gattaaaatg 960
tacttggtac taaaaacagc aggctgcaat actgtattaa ataatgagcc catgctgtat 1020
atctagacaa acatatatca taatgataat aataaatgta tgagacttat atttttgctt 1080
ctctgtattt tctaatttgt ctgtgataaa caaatattat taatgtaatg aagaataagc 1140
taaaatatac aaaaacaata acaactataa aaagaacccc ttcaatcaaa aagagatcat 1200
cagggattta attcaactat ggattggcac tattaggagg ccaaatatga ttcgttgaac 1260
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agcactttaa agatctattt gcaagataac aatgtgctaa ctttaagtaa tgtctatgta 1380
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agattcactg ggtggctgna aatctgatca agctgttctt tgggagatca ttattcaaca 1560
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tggaagaat gttatagatc atccagtcta acccctgat gttataaata tggaaattta 1860
ggcctagaaa ataggtaagt gatgaatcaa actagaagca ggtgtcctgc ctctaagccc 1920
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aactatcaac ctacaggggt aaggaaaata gcaatgtgta tatacagacc ttgcatctgg 2040
tagctgtatg gtgcctgtcc aggttgaggg gtactgaagc ttgtgccata gctgagaaat 2100
nntgtctgtc caggtgactg agactgtgac aatccacctt cagtcttgat gcctgccac 2160
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tatacaaaaa catacacttc cacaaccgtt taactacaaa tgettcccca atcttatctc 2280
aaaaataaag ggtatacatg cattcagtga aataccataa agtacaactt cagtttttta 2340
aatccaggat tacagatttg aatgtctatt cacattattc tctctgtttt tattgcactt 2400
caagacatat ccttctata aaatgtaact ccagtgatat attttcatac ttaattttgt 2460
tgttttaatt atgtaagagt tgaagatcat ctcttcaca gtaaagaaat agccataatt 2520
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ataaacaagt gaggttgacc agcagtttcc ttttgccctt gttagtgtga aatatttgac 2880
tataattggt ttcgatgtag tctaaagtac ctttgttttt atcatatgat aatataaaaa 2940

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120

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tgatgtatct gtggccccc aatacttccc caaacaccag gctaacatcg taattttggg 3000
acttggaattt ggcagcactg aggtatgggg ctcagctctg tctttaatta attacaatta 3060
aagacagtcac tacatgttaa caactctcct tcattctcac agagggaggg aagaaaaatt 3120
tctgccgagg gaattcacat tttttaataa ttttgcttcg tacttaagat aaatgatata 3180
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tgatggcttt agaaaatccc tttctttcca tgttgctacc cctagggatt ttccacctct 3540
tgctgcattt gagactatac tgatctgctt ccagccttca cctataccaa taaaatacca 3600
ataattcatg tatttttttt ttttgagacg gagtctcgct ctgtcaccca gg 3652

```

<210> 201

<211> 551

<212> DNA

<213> Homo sapiens

<400> 201

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gctgcagcga cgtcgggagc agaagcagcg gcgacacgac gcgcagcagc tgcagcagct 60
caagcacctg gagtcctttt acgaaaaacc tcctcctggg cttatcaagg aagatgagac 120
taagccagaa gattgcatac cagatgtacc aggcaatgaa cacgccaggg aatttytggc 180
tcatgcacca actaaaggac tttggatgcc actggggaaa gaagtcaaag ttatgcagtg 240
ttggcgttgc aaacctatgg tcaccgaacg ggtgacaaa aatgcccttt ctttatcaaa 300
ggcaacccaa agtttagagca gttcagagtg gcacatgaag atcccatgta tgacatcata 360
cgagacaata aacgacatga aaaggacgta aggatacagc agttaaaca gttactggag 420
gattctacct cagatgaaga taggagcagc tccagttcct ctgaaggtaa agagaamcac 480
aagcaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 540
aaaagggggg g 551

```

<210> 202

<211> 665

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (463)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (471)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (582)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (612)

<223> n equals a,t,g, or c

<400> 202

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gcggcacgag aagtcacagg tcttgccaat actggttag tttcttgcc ataccgtaa 60
tttgaaggaa atggtragag tgattagaga agtgaatta ctgtaatttt tccccctatt 120
gtagtttctt gcctgtatcc ataatttgaa ggaaatggta agagtgatta gtgaaatgta 180
attactgtaa ttttttcccc attcaacttt atatatcttt aactgatgac cagatcattg 240
ttgttctgaa ccagtttgtg gtcagcaagt gttttgtggg gttttgtttg tttgttttta 300
aagaacagtt tgggtcactt gacatgggtt tccaaaggga tkttatgggt tgtwtttgg 360
tctgggtgat aaccgacttg ttagataaatt tagataagca accgagttgc catgtttgtt 420
tgtcaaactt caagtgtagc ttatatttta tgttcctaga gangttgtca nggaaagatt 480
tgaccttttg gcaaactctg ttgaatagag atactacat gctgccaat aaggctttct 540
ggccctgaaa aatatacgga attattcttg gaaatttgaa anggaaaaaa gaaataaact 600
gatccatgtt tnttaccatg ccaaattaat tgaaggaatt ttcctaaaag gtatctcccc 660
tcggt 665
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<210> 203

<211> 2102

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1861)

<223> n equals a,t,g, or c

<400> 203

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aaaaaaaaaa aaaaaagaaa aaaaccaaac taacccaaac tctgtaaaag agtgctttga 60
gctctacaaa taccaagtat ttattgtggt atatttttag aatgtagcca tacagtgtaa 120
ttatgggtat ctgtcatgga tcacaattat tattcatagt aagtcattgt gatacagaag 180
tttgtttctt cacttcccc taagaagcca actatagtaa tcatgcaaaag ttgaggagta 240
tgtccttcag ggatataaaa agaaaaacaa atctgttttt tgagctaaaa gagcacatcc 300
aaacaagaat ttaactggct aaaatttagt aattactgtt aagtaactat caaacttgaa 360
atcttacaag ataaatgggt aagatgtctt gagtatttgg gatggggggc tgtgagtctg 420
attgagacat acattttaca gagtagcagc actggaaagg gctagtccaa cctcccagcc 480
tctgcttggg tctccgctgc cccagccaca cacatcctag aattcttgta aacatatctg 540
gctctgtggt aacagtgcac ttgttatatg ttttctaaga gattagtctt tcctgtgatt 600
tttccaagta cgctgaaagt agtagtatga acttaaggag gctagtcaaa gaaacttgga 660
gttataggta tttttaaaga ataaatcctc aattccatca tcacttggcg gggagggggc 720
acttattaag cattttagat aataaaactg gttaagctta ctctggtaga acagacaatc 780
aaatctgggg attgctgaga acaataataa gctgaagtat ggctcacaga atcctaacac 840
aatcatttaa gtctctagtt agatttggtt tcttaaaatt tttcatagaa ttttaaaatc 900
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ttaaaataaa taaatctgat tgataggaag aaaggcaaat aaatacctat gtagacattc 1020
tataataaca aagagccata gatgataaag gaattagatt ttaatgtaga atgggtggtt 1080
tctgaaacaa aggtatgtgg tactttgtag ttattgatga gaagccagta accagtagtg 1140
ttttcctaga tataatgcca cctcacaca actttcttca ttaacaaaca ttaaataatg 1200
atttgtatct tattaatata tattgtataa tgctgaagga aaacaaaaag tgttcaata 1260
atcataactt ctacattaca ggttctgttt agatgcagaa ctagaggggc cagggtaaat 1320
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122

```

gtagataaag agatatatag caccatgctt cttaatgctt catacttttg caaacagaaa 1380
aaaaaagttt tactttttatt ataaaacttc atctatgggc aaagtaaaca ctgttacatt 1440
taaattgctt tttaaaaaca attgcgatct aaaaagtcaa aaatctgaaa ttttaataata 1500
tgagacttac actgaatata atgttcattt agaagttgct gtggtccact tcatttataa 1560
ggaacaaata tttttacagt aactatagc aacagcaaaa gccctctctc accctgatag 1620
gaatggggtt gctgggtgct tagaagttag attcctgctg aatagaatta gccatcctta 1680
aaagatttta atccaatact gaactgttta taaaatgctt tctctattgt aatgtactgt 1740
aagtagtgaa attctgtata tactgctatt ttctgtctgt tcattgttgt gaacttctta 1800
tgtatattag tgaaataaat tttcagcttt catgttggtt cctaaacatt cataagtata 1860
nctaactatt aagagatttc ttcctttctt gagtaacaaa tttggtgatt atattctttc 1920
tgatccaacc ccaaaaacta gctattctga aaaggctgat gttcactaat gggaagaatg 1980
aaatgacctt tcacctctta agggaaaaca gctcgcga ttccttttca aaactatact 2040
tcttttactt gatactcaa acttctgcac caaatcagt cagtattttt ccagaatgcc 2100
tt                                                    2102

```

<210> 204

<211> 283

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (181)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (282)

<223> n equals a,t,g, or c

<400> 204

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aactgatatt taataatatt taatattgct ctaaaatttc tggctaaaat gaaaatattc 60
aaccatcagg aaggagaaac aaaactatta ctgtttgtaa acagtttata atcagtactt 120
acctaaaaat cctggagaat gagctcagaa atattttctaa gagttgagac agtttagcaa 180
natgaacaga tacaacctca aaccaaacca aactagaaag ctcagaggac acagaatgcc 240
agtactgggc tgggcaacac ctctgttgtt tgtgaaaatg tnc 283

```

<210> 205

<211> 425

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (34)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (77)

<223> n equals a,t,g, or c

123

<220>

<221> misc feature

<222> (424)

<223> n equals a,t,g, or c

<400> 205

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ccacaccccc ataaggccat ccaaatat t aaangccccc ccagtgggaa atttggtgtt 60
taaaacctca atggaancct aatatttccc ttatgtccgt tagtcccctg taaaatgtta 120
ggtcacccca aggaaagggg agaaatagca atggttggtc ctaaggtatt gcttgccctc 180
catgtcttcc taaagagcag aacttggagt ttctccttta tgtagagaag aagtwactta 240
gggtgtat t gcaatgaaat attcatagat attgaaagct tgtgtttaca tkaaatatgt 300
ttattatcaa gaagtccttt ttccaattct gtacattaaa tatatgtgtt ttaaaaaaaaa 360
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aagggggggg 420
gggnc 425
```

<210> 206

<211> 483

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (444)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (469)

<223> n equals a,t,g, or c

<400> 206

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cccacgcgtg grcagaccgc gcagggagca cacaccgcca gtctgtgcgc tgagtcggag 60
ccagaggccg cggggacacc gggccatgca cgcccccaac tgaagctgca tctcaaagcc 120
gaagattcca gcagcccagg ggatttcaaa gagctcagac tcagaggaac atctgcggag 180
agacccccga agcctctcc agggcagtc tcatccagac gctccgctag tgcagacagg 240
agcgcgcagt ggccccggct cgccgcgcya tggagcggat cccagcgcg caaccacccc 300
ccgcctgcct gcccaaagca ccgggactgg agcacggaga cctaccaggg atgtaccctg 360
cccacatgta ccaagtgtac aagtcaagac ggggaataaa gcggasgrrg gacagcaagg 420
agacctacaa attgccgsam cggntcatcg agaaaagaga cktgacggnt taamgaktga 480
tcg 483
```

<210> 207

<211> 976

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (193)

<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (929)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (958)
<223> n equals a,t,g, or c

<400> 207
agctttcagc aagagatggg cacaatcaga aggataatac aaagtcaaaa gagaaggaga 60
gtgaaaacgc ttccaggaga tggtaaagga aataagcata agaaacacag aaaaagaaga 120
aaaggggagg aaagtgaggg ttttctgaac ccagagttat tagagacttc taggaaatca 180
agagaaccta cangtgttga agaaaataaa acagactcat tgtttgttct cccaagtaga 240
gatgatgcc aacctgttag agatgaacca atggatgcag aatcawtcac ttttaaatem 300
gtgtctgaaa aagacmagag agaaagggat aaaccaaag caaaggggtga taaaaccaa 360
cggaagaatg atggatctgc tgtgtccaaa aaagaaaata ttgtaaaacc tgctaaagga 420
cccaagaaa aagtagatgg agaacgtgag agatctccct cgatctgaac ctcccaatta 480
aaaaagccca aagaggagac tccgaagact gacaatacta aatcatcatc ttcctctcag 540
aaggatgaaa aaatcactgg aacccccaga aaagctcact ctaaatcagc aaaagaacac 600
caagaaacaa aaccagtcaa agaggaaaaa gtgaagaagg actattccaa agatgtcaaa 660
tcagaaaagc taacaactaa ggaagaaaag gccaagaagc ctaatgagaa aaacaaacca 720
cttgataata agggagaaaa aagaaaaaga aaaactgaag aaaaaggcgt agataaagat 780
tttgagtctt cttcaatgaa aatctcgaaa ctagaagtga ctgaaatagt gaaaccatgc 840
accaaagcgc aaaatggaac ctgatactga aaaaatggwt aggaccctg aaaaggacaa 900
atttctttaa gtgcgccacc aaaaaaatnc aaactcaaca grgaaactgg gaagaaantt 960
gggagttmcc gaaatt 976

<210> 208
<211> 660
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (560)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (567)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (583)
<223> n equals a,t,g, or c

<220>

125

<221> misc feature
 <222> (589)
 <223> n equals a,t,g, or c

<400> 208
 ccacgcgtcc gccgacacgt cgggattggc ggctgcagcc aggggtcctc cgacgctggg 60
 cttccgtgag cggcgctctg ccaggtgggg ccggagctgc ggggagggag ttggcgcta 120
 gcgcgcactc catccccgcc tctgcagtgg actcggccgc agaatcgggg tcccgggctc 180
 ctggaacttg tcccscacag gccgcggcga ggaggtcact ccagccgatc tctggaccgg 240
 attcgtccca ttctcgtcct catggtggac aagaaactgg tgggtggtttt cggaggcaca 300
 ggtgccacgg gtggctccgt ggcccgacac ctcttgaag atgggacatt caaggttcga 360
 gtggtgaccc gaaaccctag gaagaaggca gcaaaggagc tgaggctgca aggtgcagaa 420
 gtagtgacgg gagaccaaga tgaccaggtc atcatggagc tggccctgaa tggggcttac 480
 gscaccttya tctgtaccaa ttatgggaga gctkcagcca ggagcaggag gtmaagcagg 540
 ggaagcttct tgctgatctn gccaagngcc ttgggcttca ctntgtggnc ttcaaggggc 600
 cttgaggaca ataaagaagg ttacgggaag ggagatttgc cgccggggaa cttttaccgg 660

<210> 209
 <211> 514
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (56)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (464)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (467)
 <223> n equals a,t,g, or c

<400> 209
 tggaaccaat ctttgtggta catattccag ctttttgaat gagtgcatac ccagtnagta 60
 ccttttaaagt aacactttgt acataacaar tactcagcaa atgtgaaact ttatttgctc 120
 ttacttcaaa attagtccaa aatgttggaa ataaaatata agacattgat ctatgataga 180
 gggtttttctc cttcattctc agctgtcgaa gaaatcraag tagcatatgc acaaggwtaa 240
 aaaccacata tacaaatact atagaacagc ttataatgaa aaccttgcct gcctttataa 300
 aaaatgtgat tatcttcttc tgtaaatgtc aataaaagat ggtttgtcct agaaggctta 360
 taaatggtat tatgttcttg agggtttaca tatgaaaaat gtagaaaata caaaaagtgt 420
 ctatatatac aaaaatgtaa gtgttaacat ttttatattt gccntcnagc ttttttttta 480
 aataaaagga atgcatatt gccattaaaa aaaa 514

<210> 210
 <211> 173
 <212> DNA

<213> Homo sapiens

<400> 210

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gtcaatgctc tgaaatctgt ggagcaaacc acagtttcat gcccacgctc ctagaattaa 60
ttcccctaaa aatcttttgaa atagggcccg tatttaccct atagcacccc ctctaccccc 120
tctagagcca aaaaaaaaaa aaaaaaaaaa aaaaccctgg gggggggggc cgg          173
```

<210> 211

<211> 1521

<212> DNA

<213> Homo sapiens

<400> 211

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gctatcaaaa tcatgacatt atgtcacttg gagcaacaca gttgaccgcg caaggcagcc 60
tcttcctcca tagatggatg aacgctgtgg ccgctgctcc tkcmctggcc atgccctgay 120
gctgcccaaca ccaactgctcc tctatttata agtcttarta gagttgctga cccagcaata 180
actgaacagc tgatatgtac ctcacactaa gccaggcgct tcatatgtat ctaacttgaa 240
aaatgctgag ctagttacct taacaccatt aacttttact taaaagtttg tttttctttt 300
ttaatcccag tgagctccaa acaagtttta ggaggctccc caaaaccagt gaagacttta 360
actaaaagta gaatttcaaa gtattagaaa ccaaacccca aaattaaatg tgaagatcag 420
tgtctgtact gagctggccc atctggtgga cacaggattt gcgttatcga ctgcaatggt 480
accaggatt cagcgtttct agcatctgtc aggggttaaga aaattggatt gagtacaaaa 540
tacagcagag caaaccgggc tttagaggca gggccccatc aagtagtcat gcagtacttt 600
tgtaggggtt ctgggtgcaa atcttcctcg tccctccac cttctcctgg cctccttgta 660
aaccctaaacc gccagggtacc tcaattttct tcaagaccag gctgttctta atgttggtta 720
attggtcaag gaaatgggtg agccactgct tgctctgcac atcgtcctca gagtgtctcg 780
tcttcaggca gtacagcagc tgcattgctt tggcctgcag gagtaagtgg cccattccta 840
ggctgtcccc aaagatgtgt cctctgaaga agctggtcag gtagaggggg tgtccactat 900
ggttatagat ggtgaaggag atgctgcccc ggctgagcgt tttgtccacc tgccagggtg 960
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ggtgaaatgg ccctacacca aagtgggaga cattcagaat cgaggcgaaa ttggcctcag 1260
tgctcctctt ggaggcagag aagcagtagg agtcggtggt gaaatggccc tgtgtgaatg 1320
tggaagacca gcagattgga ggtggaattg gcctcagtgc ttgtcctgga ggtggagaag 1380
cggtcagagt ccttggtggt gaagtggccc tgcacaaaac gttgctcccc cttggccggt 1440
gaaagaataa aagaaagctg gccacttgca aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1500
aaaaaaaaaa aaaaaactcg a          1521
```

<210> 212

<211> 1875

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1052)

<223> n equals a,t,g, or c

<220>

127

<221> misc feature

<222> (1291)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1849)

<223> n equals a,t,g, or c

<400> 212

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gtctgctggt gtcagaaggc agggagggtg atgaaggact gaccacatg gactgggatg 60
tgtgtcggtt atgggcatga ctgcacgttc actctcagtg ggatctgggc aacatggagt 120
tcattgtcct gttgcttact tactgcaatg tctttggccc tccttttcaa ctgggttcctc 180
tgttgggccc aaaggttggg agtaggagac agtateccag gctgacaagg gcttgccytt 240
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gttggtatgt ggggaagccca tctcagttcc tgtgaactca tgtctcaaac caaggatgag 360
cgtctggtct ctgctatgat ggtggtatcc gaggccttcc cctgcccagt ctggtgctg 420
ccccacattg taccggacac tggattcctg gaccccttc tcctttcctt tctttccttc 480
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ggtttggggc acaaggaagc cttagggtat ggggaaaggc tgttattacc tagagtttac 600
tcccaggcca gggggctgcc atcttcttca cagacatccc tgaaaggaag cccctttggg 660
gcagggaggt gaggacttca tctcaacatc ggctggtggt tggtagggga gcttttyctt 720
ttctttcctt tttttttggt tttgtttttg tttttgtttt tggtaacatg ttaggagtta 780
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ttacgctcgt agtacattat ctttactatg tgctaggata tcatatttaa aaggacaaaa 1620
aaatgtaaaa tacttgaatg agcttgattt ataacattaa tattattgag agtatctgct 1680
ttccaggctg aagtgattca ttcattatc tagtcctgct ttagtccttt gtaatttggt 1740
gtaattatgc ttttcttttt aatacaaaaa aatgtataaa aataaacact tgaaaaggca 1800
aaaaaaaaaa aaaaaaaaaa aaaactcgag ggggggcccc taccaatnc gccggatagt 1860
gatcgtataa caatc 1875

```

<210> 213

<211> 1917

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (798)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (802)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1073)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1748)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1829)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1887)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1891)

<223> n equals a,t,g, or c

<400> 213

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gaattcggca cgaggcagtg gtgtgatctc agctcactgc aacctccacg tcttgggttc 60
atgcaattgt cctgcctcag cctcccaagt agctgggatt acagacatgt gccaccatgc 120
ccggctaatt tttgtatctt tagtagagac ggggtttcac tatgttggtc aggctgatct 180
caaactcctg acctcaagtg atccaccccc ctccggcctcc caaagtgcta ggattacagg 240
catgagccac catgtctggc cctacttttc ttttatgcct tctttttgga ttaatcaaat 300
atcttagtttc attacccac tattaacttt ttctattata tattcttttt ttaattaagt 360
gattaccctt gggttgttac atacatcctg aacttcctat agtaaataata catgattaat 420
ttaacctctt cctagcaat gctcagattt tagaacatta taattccatt tagtctcttc 480
taccttttgt tttattgttt tcatgtattg taatcctaaa catattttac accccacaag 540
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cactgccacc attttattga aagtcagcac caaatcaatt aaaaactgaa ggtaatatct 900
ctccccctca ggctgttawt aatttttttc yttgaccttg gtttttawta gkgttactgt 960
aatgtgcaa gatgtgmctt tctttawatt catcctgctt gggattttca ggaattcatg 1020
cctcagggct ttatgtcttt cattagtttt gggaaaattt taagccatta acntttcaaa 1080

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129

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gatcatctct tccctattct ctcttyctct ctctgctatc cttttgraac tccaattmca 1140
tgaaagtttag atttgttcat gttattcctt acgtttctta tgttcttttt tatattttcc 1200
atctttttcc ctctctgagt gtcagctctg tgataaggta gtcttgagga cttgtgtctg 1260
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aagggttgtgt gcatgttcaa ggctgcatgc atgttcagga aataccaaca ggggccaagt 1560
tacttattca tctcttactg accttgagac tcagtgttaag caggcaatga aacctaaggc 1620
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ccatgctncc tgagatgacc aggacctaga agtagctaaa atagaacaga tttaaaaagt 1800
acataattct gtggagatct gaggttttna ctagcttgaa tgtacaacac acaacctgtg 1860
ggtgggataa attaagcata aacttgncta naaaaaaaaa actcaggggc cggccat 1917

```

<210> 214

<211> 1544

<212> DNA

<213> Homo sapiens

<400> 214

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ggcacgagct atagcaatct gggttttctt agccaattga aatgggcatt tattagatca 60
tttaagcatc atatcaatat agtatatttg ggcactttat gataagttct tatgatagat 120
gttcaaaact ctgctcaggt gacattttta tggatccaca tagtttttgt catatatgaa 180
aagaaagcat tgagttgtgc agatggttaa atgtgcattg agttatttct ctggaatttg 240
catgagaatg gaccgacttg tagttgtatt aacttttcta gtgcccaggt tagaaagt 300
gatctgtgta gttttttaaag gcagcatcca aatcacttat attcagaaga aaatggtaac 360
agatttagaa gctgtctata tttcccccac tatccataat acatattatt ggcaatatgg 420
ttttcactct ttgttggtta cgtatcaaca atgtgcaata gccactaata atcatttggt 480
aatgcatgct tccaagttct gtatttgaaa atctcagact tcatatatgg taagtgatgg 540
agtaatttat aacttttatg ttgaattctt gctactttaa aaaattgtgc ttctcctttt 600
ttaaagcata tgacttactt aacagctgat agtcagttac ctggattttt agtatttttt 660
tacatcacia aaagatttct ctgaagtttg cgcaggggtc tatttgtagg cagtttccaa 720
cttactaata agtaaggttc tgaaagttat aagtttagctg tctggaatag atagtctcat 780
agaaaccagg ttgtagatgg tgatttggtt ccttgggcaa cctactgaaa cccattttact 840
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gtagtgcgat ttgacttttt ctacctccat tctaccagtt cacagcgcac tctagcagtg 1020
gaaatcaaaa aacctattga gatggaattt gggaggaaag gaggacttac tgatatccct 1080
agctgtagaa agaaagtaac tgggtatcct gtctgaaaga ggaaggatgt gatgatcttc 1140
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gcctgtaatc ccagctactc aggaggcgga ggcaggagaa tggcgcgaa cccgggaggcg 1440
gagcttgag tgagccgaga tggctccact gcaactccagc ctgggcgaca cagcgagact 1500
ccgtctcaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 1544

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<210> 215

<211> 1762

<212> DNA

<213> Homo sapiens

<400> 215

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catgagccac tgcacccagc cgatactact atatccccat ttacagatg agcacatggg 60
caaattgagg gtaaggcact gacccatgat catacagctg agaagtggca aaggcaggat 120
ttgaacctag aacctctggc tccacacact agtaatctaa accactctcc ctacaataca 180
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cctacaaccc gacgtgcct tactaccagc ccatccccgg cgggctcaac gtgggaatgt 780
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<210> 216

<211> 253

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (236)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (238)

<223> n equals a,t,g, or c

<400> 216

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131

```

gatgcttggc acgtaccccg tgtacatact tccccgggcg ccagcatgga aataaagcac 120
ccascrcctgc cctgggcccc tgcgaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaagggg ggccgntnta 240
aaaggttccc tcg 253

```

<210> 217

<211> 511

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (471)

<223> n equals a,t,g, or c

<400> 217

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ggcagctgct cgaaagagta ccgctgctc cttggccagc tccagaagca gacagatctc 180
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ccactccata tggccaggtc ggggaactga gtcgctatgt tattccagcc ttaaccctga 360
ggagctaagg ctggccctcc agctttccta gctctgtggt cccggggcgg gactccggac 420
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ctaggcaatg ggacgtagca gtgaagcaag a 511

```

<210> 218

<211> 2945

<212> DNA

<213> Homo sapiens

<400> 218

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ggaattccaa ctatggcctg ctgcctgttt ttggctggtg agctaagaat gattttttaca 60
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tgaagttcaa atctcagtg ttagaaataa agttttattc gcacacagcc tgctcatttg 180
tttacctatt gtgcatggcc actttcacat tacagtggca gagttgaaca gctgctgcag 240
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tcattttaaag taatagattt aaacagtctc cataagcagc tgctggcttt gaaggtaggt 360
gcagccacta gtgcttttct tggcagattc attgccaagg aacagtttgt taagtaattc 420
ccttgttttg tgtgccaggc tccataaaga aagggttctc acgctcaa atatgggcaa 480
tacctcatgc tatgtatgta tatgtgattt atttctctct aggggaacaaa cctgtataat 540
tgcttaattg agtctcctta aaaggtagaa aagggtctct tgggtcaaata attgtaggaa 600
aaagattgac aatcacagtg ctgagaaggc ctccaataga gaagttggtt tagttgttcc 660
tcgatctccc acctcctcct tttgagctca gcctttttag aattaatcat tgccctcctc 720
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tggaatattg ttgaatgaat aataacacct gccacttctc agtggtttatt ggggtgctgag 1140

```


132

```

ctgatctcat tggatttttt ttttttcttg agacagagtc ttgctctgtc acccagtcac 1200
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tgaggcagga gaatcacttg aaccctggg ggcagaggtt gcagtgagcc aagatcgtgc 2880
cactgcactc cagcctggat gacagagtga tactccatct caaaaaaaaaa 2940
aaaaaá                                         2945

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<210> 219

<211> 445

<212> DNA

<213> Homo sapiens

<400> 219

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ccaaattcta tggccggcta atgttttgct atggtgacta tcacccatct acctggaagc 120
accagaatgg cttagtacag ctaggagct cagccagatc tcggtgtctg ctgtttgaga 180
ttgtgtggaa ggactattgc taagaagcag gagacagact gaaccagtg ttggccacaa 240
gtgaggactg agaccagggt cacctcttgg ctgaacatgt tagcttggtg gtaaattggc 300
ctgcagtggg tctgcatttt agtggggaat ttgttttggg tcattttggc attcccga 360
ccatcttggt ggttttttgg taaaatgtgg cacccttcc agacctytta gctgtggaam 420
tgagrtattt tagcagggtc ccgtt                                         445

```

<210> 220

<211> 522

<212> DNA

<213> Homo sapiens

<220>
 <221> misc feature
 <222> (402)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (417)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (480)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (482)
 <223> n equals a,t,g, or c

<400> 220
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 aattaatgta tataattaga tattattagc tactcttagg tagcttcatt tgttgaaagt 120
 ttgacaagtg aatgaagttc acatctggaa atcgttgaac attttctgtt catggaactc 180
 aatggctacg ttagtcgttt atgcttttca ctggttggtt aggggctttg gaagtaaattg 240
 ccatcaacaa tggatacaga agacctggat ttggaataag ggcaaaattt atttgatggg 300
 gctgaattgc tctgccagga gcatttggtt tgagatgaaa tggctctctt gagactgagc 360
 tgccacctgg gcaatattgg ccgctaaggg tctctttatt cnccttactt ggacttnctt 420
 tcctggaggg aatctcccga aaaaggaaac ttctcttccc cagggggggc ccaatgggtn 480
 cnagggtctg cttcaaaatg gggtccccaa ctgggtggcat ca 522

<210> 221
 <211> 1516
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (1493)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (1497)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (1508)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (1509)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (1516)
 <223> n equals a,t,g, or c

<400> 221
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 tatctttggg gatgcctgtg ataactgcct gagggtctta rataacgacc agaaagacac 120
 cgatggggat ggaagaggag atgcctgtga tgatgacatg gatggagatg gaataaaaaa 180
 cattctggac aactgcccaa aatttcccaa tcgtgaccaa cgggacaagg atggtgatgg 240
 tgtgggggat gcctgtgaca gttgtcctga tgtcagcaac cctaaccagt ctgatgtgga 300
 taatgatctg gttggggact cctgtgacac caatcaggac agtgatggag atgggcacca 360
 ggacagcaca gacaactgcc ccaccgtcat taacagtgcc cagctggaca ccgataagga 420
 tggaattggt gacgagtgtg atgatgatga tgacaatgat ggtatcccag acctggtgcc 480
 ccctggacca gacaactgcc ggctggtccc caaccagacc caggaggata gcaacagcga 540
 cggagtggga gacatctgtg agtctgactt tgaccaggac caggtcatcg atcggatcga 600
 cgtctgcccc gagaacgcag aggtcacctt gaccgacttc agggcttacc agaccgtggt 660
 cctggatcct gaaggggatg ccagatcga tcccaactgg gtggctcctga accagggcat 720
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 tggagttgac ttcgaaggga ccttccatgt gaatacccag acagatgatg actatgcagg 840
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 gtatcgctgc aatgacacca tccctgagga ctccaagag tttcaaacc agaatctcga 1320
 ccgcttcgat aattaaacca aggaagcaat ctgtaactgc ttttcggaac actaaaacca 1380
 tatatatattt aacttcaatt ttcttttagct ttaccacacc caaatatata aaaacgtttt 1440
 atgtgaatgt ggcaataaag gagaagagat cattttttaa aaaaaaaaaa aanttcnggg 1500
 gggcccgnc caattn 1516

<210> 222
 <211> 1387
 <212> DNA
 <213> Homo sapiens

<400> 222
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 ctcttctcata gtgagaagtt ccagggttga ccataagcac ctctcactta ggtggaccag 120
 tcagctgctg tcgtcccagg gtggagccca ctgctacttc aggaggggccc tgctcagggtg 180
 tagttaccac aggtgatggc tgagttcaga aacaaccagc ggggaagtgga aggaagaaag 240
 gcaaaaagca tgaagggaca gacaactggg aagaaccagg acaatcctgt gattgatgaa 300
 atagacttcc ttgaagcttt taaaaatatt cagccctcat cgtttcgaag cgtcattgga 360

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ttaatggata tcaagcctgt tgactgggag gagattgggtg gccttgaaga tgtaaaactg 420
aagttaaaac agagcattga gtggcctctg aaattccctt gggaatttgt tagaatgggc 480
ctgacacaac caaagggagt tctcctctat gggccccctg gatgtgctaa aaccactctg 540
gtgagggccc tggccacaag ctgtcactgc tctttcgttt cagtgagtgg agctgatctg 600
ttttcaccgt ttgttggaga ttcagaaaaa gtgttgtctc agatatttcg acaagcaaga 660
gcaagcactc cagcaatttt gtttttggat gaaattgatt caatcttggg agctcgctca 720
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caagaagttt ttaaccgaag tgtcatgatt attgcagcaa caawtagacc tgatgtgtta 900
gatactgctt tgttacgacc tgggaagatta gataagatca tctatatccc acctccagat 960
cacaagggca ggctttctat tttaaaagtc tgtacaaaaa ccatgccaat agggcctgat 1020
gtctccttag aaaacctcgc agcagaaacc tgtttttttt ctggagctga tcttagaaac 1080
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ttggctttat atgaaaactt atttaagaaa gaaggatttt ctaacgtgga aggtatttaa 1260
aaatcacctt aaactcttgt tcagttcaca ttaattgaaa tgtgaacttg cctgtcgttt 1320
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acaaaac 1387

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<210> 223

<211> 1506

<212> DNA

<213> Homo sapiens

<400> 223

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gaattcggca caggtgggta gaggtgatgc agtgctgaag acctgggccc ctgctcagtg 60
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tgtccactgt cagccccctc ttgccatgg agataaaagt ctgcaggggc ctcaaccccc 180
caggcatcag ctctcagagc cagccccgc ctaccacaga atcacacca ccattaccaa 240
ttttgctttg cgtttgtata aagagctggc agcagacgcc cccggaaaca tcttcttctc 300
gccagtgagc atctccacca ccctggccct gctctctctt ggggcccaag ctaacacctc 360
agctctgatc ctggaggggc tgggattcaa cctcacagaa acccctgaag ccgacatcca 420
ccagggttc cggagcctcc tccacacct tgccctgccc agccccaac tcgaactaaa 480
agtaggaaac tccctgttcc tagacaagcg actaaagcct cggcagcact atttggacag 540
catcaaggag ctttatggag cttttgcttt ttctgccaac ttcacagatt ctgttacaac 600
tgaggaggcag attaatgact atttgagaag gcaaacatac gggcaagtgc tggactgcct 660
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aaaaaa 1506

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136

<210> 224
<211> 896
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (18)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (40)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (45)
<223> n equals a,t,g, or c

<400> 224
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gccaagtcag cttcttctga gagagtctct agaagacatg atgctacact cagctttggg 180
tctctgcctc ttactcgtca cagtttcttc caaccttgcc attgcaataa aaaaggaaaa 240
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tgaagaaggt ctcttttatg ctcaaaaaag taagaagcca ttaatgggta ttcacacct 360
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tacccttatt gatagaaaac atgaagaaag cattaagact tattcagtca gagctataag 660
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acattgacaa atactaaatg tgcaagtata tagattttgt aatattacta tttagttttt 780
ttaatgtgtt tgcaatagtc ttattaaaaat aaatgttttt taaaaaaaaa aaaaaaaaaa 840
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa 896

<210> 225
<211> 127
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (94)
<223> n equals a,t,g, or c

<400> 225
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ctttctgact ctaagtggca ttcaaggtaa gggncatcaa aggggtacttg aatttgtaag 120

atgagat

127

<210> 226

<211> 1949

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1466)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1540)

<223> n equals a,t,g, or c

<400> 226

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tgactgaatt tctacatgac ggctttttga caagacttaa aacctgtctt ggatagagaa 180
tatttagcca ttacctaata aatgggtattt ttacatgca atgcatgtgg tgaatcagtg 240
aagaaaatac aagtggaaaa gcatgtgtct gtttcagaa actgtgaatg cttttcttgc 300
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1949

138

<210> 227
<211> 1179
<212> DNA
<213> Homo sapiens

<400> 227
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cataaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1179

<210> 228
<211> 1958
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (374)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (377)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1244)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1300)

139

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1311)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1327)

<223> n equals a,t,g, or c

<400> 228

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gtcctgcagg ctgtaatgca gtttaatcag agtgccattt ttttttttgt tcaaatagatt 1860
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aaaaaaaaaa aaaaaaaagg gcggccgctc tagaggat 1958

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<210> 229

<211> 1751

<212> DNA

<213> Homo sapiens

140

<220>

<221> misc feature

<222> (1741)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1742)

<223> n equals a,t,g, or c

<400> 229

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cacttgaaca aacctggtgg tctttggaaa taaatcacca ttagatttca cctggttatg 180
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aagattttgtg aatgctgcat catgatgaaa atgtggatta actgtgggtt gcatgcctgt 360
tgttcatact tcagtgtgag tcacacacaa aacaagatga gttttactta ggtgaaacat 420
tattaaactg tactaacaat acagaaacat attctctttg tcgcttttta tcacaaaaac 480
tgaatggcaa atatgtcttg acattacttg gatgaactgt ggctagcaaa atggaattaa 540
cttagccact ataatttttt aaaacattaa agtttctaaa ttgttttttg gggccgagta 600
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cttttttaat tccgtactgg tatttgtgtt atttaaaaag caaaattctg ctctatttag 1500
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agctttccta agtatatata aatgcatata tgtataaaat tgggaaaagt tacctcaata 1620
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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1740
nnaaaaaggg c 1751
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<210> 230

<211> 2153

<212> DNA

<213> Homo sapiens

<400> 230

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cccatatgtg gtctgtgagc cacccttaac actgggttcct ttgctctttg atatgcctac 180
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<210> 231

<211> 1360

<212> DNA

<213> Homo sapiens

<400> 231

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cagccaacta ctttgcgttt aaaatctgca gtggggccgc aacgtcgtgg gccctactat 540
gtgctttgaa gaccgcatga tcatgagtc tgtgaaaaac aatgtgggca gaggcctaaa 600

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142

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catcgctgg tgaatggaac cacgggagct gtgctgggac agaaggcatt tgacatgtac 660
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ctggtggctc ctacgacgat ccagggacca aaatgaacga tgaaagcagg aaactctttc 780
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<210> 232

<211> 1986

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (6)

<223> n equals a,t,g, or c

<400> 232

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tggactatgg tttcgggttg gaggtgccat aaaggagtta tcatcagagg acaagtcctc 180
agagtatttc tatgtggggc tgtatgttct ggttgaggcc ggggccctga tgatggccgt 240
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143

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aactcttctg tttctccaaa tataaggaaa aaagactaaa gcaagagatc tggcagttga 1620
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tttcatgtt ttcttaactt tttgtatttt tcttggatag ccacctagag aattcttcat 1740
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accattagca tctttggcca aaccctaaata aagaaaagca tcttctccta gttgtgtgtg 1860
ggcaacagaa acaagttaag gaaacaaaaa tacttatata tacacaggac caaataatg 1920
ttctttttat gcaaatcccc tgtggaaata aaattttcaa tgtttaaaaa aaaaaaaaaa 1980
aaaaaa 1986

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<210> 233

<211> 705

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (108)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (680)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (696)

<223> n equals a,t,g, or c

<400> 233

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acaagcttaa cattgtagat gtttctcttc aaaaatcatc ttaaaccattt gcatttggaa 180
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atattgatat ttttaaaaca tttttacata taagttaaact gccatctttg agcataacta 600
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<210> 234

<211> 838

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (32)

144

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (51)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (822)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (832)

<223> n equals a,t,g, or c

<400> 234

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gtacttgaat agttacagca tatgtttgaa caggaagtag gaacatgcat acacgaagaa 240
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taatgacatt actgtttgta gaatgacata tgcagatttt ctcataagca gtcatttgt 360
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taattcgttg gttttgatcc tcttattctc ttgtcttttc taaatgttaa caaaatata 480
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gattcggatg ctttatattat agtaactgaa gctaataatg ttttatgttt tgattttttg 600
aaatttaatt gtgaaagtca ctgccttctg agttttcaaa tagataacca cttttaatat 660
tacactgctt ataatactaa tgtttacaga tatgtttctg tttataacca tataatacat 720
tggtcttctg atattagttt tttttgcaag tagttatgta aaagagatag ataataaaat 780
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<210> 235

<211> 1410

<212> DNA

<213> Homo sapiens

<400> 235

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ccacgcgtcc ggtccctagg agataagagt atcttgcaca gcaggtgcag gtttcccagc 60
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gtgtgagcct gaatttggca atgacaaggc cagggagccg agcgtgggtg gcaggtggcg 180
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ggtgatgctc ctcccgtact ggggtctcaca gctgctcggg gggatgctcg gggctgctt 480
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gctggccctg gctgtatgca tgggtgccat caatgagaag acaaagggcc ctctggcccc 660
gttctccatc ggctttgccg tcaccgtgga tatcctggct gggggccctg tgtctggagg 720

```

145

```

ctgcatgaat cccgcccgtg cttttggacc tgcggtggtg gccaccact ggaacttcca 780
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gattcctgct gctccaggtg tcctcagctc acctgtccca gactgaggac aggggagttc 960
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gccacttcct tgctttctca gctgacaatt ctactttgc aataaatagt ccagtgtttc 1320
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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1410

```

<210> 236

<211> 422

<212> DNA

<213> Homo sapiens

<400> 236

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tttctgccac tcactggtag cctggtagat ttgtagcaac tgttgcagcg cgccaatgcg 180
gaagtcagtt tcatcgggtca gctgattgaa catgtcttcc gcgcgggtcat ataaccggcg 240
ggccatgtaa tcacgccccg gttgttgaat cgccaacaga cgctgttcat aggtcagcga 300
ggcgctttcc attaggggtc gatggatgcg aatagcgcgg ttcaacttcg ccacggaacg 360
ggaacaggtt ttccgagcgt aaggtgggct tcaacgggtg ccgttatcc tgttttaagc 420
at 422

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<210> 237

<211> 351

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (253)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (322)

<223> n equals a,t,g, or c

<400> 237

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cgttacgtta gaaaaatttc gttgcgtgct gaaagcgctt ttacctgtgt tgtatgattt 180
aaccttatga aaatggacag tatttccagt ttacaagtg aggaaagaag attaagaaac 240
ttgcctccgc cangcgtggt ggttcactcc ctgtaatccc agcactttcg gcggccgaag 300
caagcggatc acttgaggtc angagttcga agaccagcct gggccaaaca t 351

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146

<210> 238
<211> 2682
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (647)
<223> n equals a,t,g, or c

<400> 238
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tagacagact atgctctttt ctgccacca aactcgaaaa gttgaagacc tggcaaggat 180
ttctctgaaa aaggagccat tgtatgttgg cgttgatgat gataaagcga atgcaacagt 240
ggatggtctt gaacagaaga accgaaagaa gaagcttatg gtcttctttt catcttgtat 300
gtctgtgaaa taccactatg agttgctgaa ctacattgat ttgcccgtct tggccattca 360
tggaagcaaa aagcaaaata agcgtacaac cacattcttc cagttctgca atgcagattc 420
gggaacacta ttgtgtacgg atgtggcagc gagaggacta gacattctcg aagtcgactg 480
gattgttcag tatgaccctc cggatgaccc taaggaatat attcatcgtg tgggtagaac 540
agccagaggc ytaaatggga gagggcatgc cttgctcatt ttgcgccag aagaattggg 600
ttttcttcgt tacttgaaac aatccaaggt tccattaagt gaatttngac ttttcctggg 660
ctaaaatttc tgacattcag tctcagcttg agaaattgat tgaaaagaat tactttcttc 720
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agtgtgctaa catcgaatat agagaaaact ggtaaagaac attccagtag gaaaagaaaa 2280
gaacaatctt ccatttcttg gcttggccac catcaccctg gtccgacctg tcctggactt 2340
ccaaccttga ctgctgagct cctggcttag cttcttgggt tcctaattcc tgggtgttaa 2400

147

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taattctctc cacgatcatg tttttctgat ttttttttcc agaaataatg ttttttaaaa 2460
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gtacataatc taatttttat atgcatgtty atgcttttta atttttttat caaaaattaa 2580
gtcatctacc tactacttgt aaccagcttg tttcataaca tggtattttc ctgtgtcatt 2640
aaataattac ttcaatgttg aaaaaaaaaa aaaaaaaaaa aa 2682

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<210> 239

<211> 2254

<212> DNA

<213> Homo sapiens

<400> 239

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tcaaatccac aatatgctgt ataataccgg ttttactata taatctattt tagacatagc 180
tgtttagaac tagagtgtgc tatttttgtg tttttctgat gtgtgggtgct agacaagtta 240
cttttgtgaa caacaaaaat tatccctttt attcctagac aataccacct ttgggtcttg 300
ttaatttcac tgagtataac tatatatattg tatatatata catatatata tatatctacc 360
tatgccccac tggcagctgt atcagagtgc tggatttggg acatgctttt ctctttaaat 420
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catttaaaaa gaccacatga aatgctgatt ctaattgtgt gtaggtcttg aggattaagc 1680
acacaaattt cacaaacttc tgtttgagta aacaaactca gccttctgta aatatacatg 1740
caagtttgga aacagtaata ctgtacctat aaatatatgc tgtctgtttt gtgtacagta 1800
tgtaaaaact ctttttctgc cacactaaaa atgcaagcca tttatgggaa tcctaaaact 1860
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ccytgggttt tcttttcaat tcaactctac actagtctgc ttatttccag ctgtttattt 1980
tattgagtc tgaatttaaa aaaaaaatat tttgattcat tttgtaaata caagctgtac 2040
aaaaaagaga gatttaattgt tgtcttttaa atactccaat tttcattcta atatgaatgt 2100
tgttatattg tacttagaaa ctgtaccttt aatattacat tacctttatt aaaagtgcac 2160
tgaacacatc aattttagat gtgctttatg tactgttatc ctataataaa acttcagctt 2220
ctaattggaaa aaaaaaaaaa aaaaaaaact cgag 2254

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148

<210> 240
 <211> 1057
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (958)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (966)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (1035)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (1053)
 <223> n equals a,t,g, or c

<400> 240
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 actcttaaag taatctctct tgggcagagg cttattgca ccagagggaa aaagtatata 180
 cttcatttgc tgttactcca gttatgcctt aaattcattt gcttggtaat cctatcaacg 240
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 ctttattttt tgctgagatg gagtcagtc gatgttagtc atagctaaca ccgaatttgt 360
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 aaccagcag aaacctttca cacagccact catcgtaaga aacgcagatt tttctcttct 600
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 gccgtcttcc ttctggetta gcaggtgctg cagctgtact ctcgactcct gtctgtgnag 960
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<210> 241
 <211> 498
 <212> DNA
 <213> Homo sapiens

<220>

149

<221> misc feature
 <222> (493)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (496)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (497)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (498)
 <223> n equals a,t,g, or c

<400> 241
 gagttgatcc tgagatgaag gtggagcgtt acaagcgcac ctttgaccaa aatgaggagc 60
 tagggctcaa tgacatgaag acagagggct atgaggcagg cctggctccg caacggtagc 120
 agtgggtggc tcaagggcca gcctccagcg ctgctctttc tgtaggttat ttattagtat 180
 tggatgaagg cgaaggctgg gagtgtcttt cccaccagcc cttgcccatt gtggggagga 240
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 gcctattgtg ttacttgacc ttattttgga agttttgaat tggcctagga ggaaaccag 360
 aaatgaacca ggggtatgtc atcacttttt tcatatcaag tcctcacct ccttccacat 420
 aatgctctat cctctaargt tggaactctg aarttgagga argtggaata aagttacacc 480
 tggaaaaaaaa aanaannn 498

<210> 242
 <211> 1784
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (1739)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (1777)
 <223> n equals a,t,g, or c

<400> 242
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 gcagatcatt cccctgctg gctacttttc ccaagtggca gagcacatcc gcaaggccgg 180
 aggggtcttt gttgcmgatg agatccaggt tggctttggc cgggtaggca agcacttctg 240
 ggccttcag ctccagggaa aagacttcgt ccctgacatc gtcaccatgg gcaagtccat 300

150

tggcaacggc caccctgttg cctgctggc cgcaaccag cctgtggcga gggcatttga 360
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ctggccgtcc tgaatgtctt ggagaaggag cagcyccagg atcatgccac cagtgtaggc 480
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agaagtgtg aaacgctgag gctccagccc taagccagcc ctgctctgcc taagtgtact 840
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<210> 243

<211> 936

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (840)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (854)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (865)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (905)

<223> n equals a,t,g, or c

151

<400> 243

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gcgtgatgct gggcaggccc caagctgaaa agcatctcct ccaacttact ttattcttag 180
caattcattc ctttggtttg aaaattcttc agcatcttca agagtccttt actaatgsat 240
cctttggggg agttgtgcta aattatcaac tcacaaggat gagatkgctg gctctagggg 300
gccagcctgc caacatggat gggctgtccc aggstctcaa gtgagctcag gtctgtacac 360
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gcctggccct ggaaaccact tgtctcctga aaatgccatt ctctggaatg tagctgtgga 540
gtaggagag agttggcccc tgtgttctgt aacccaagca agtactgtct cactgccatc 600
ttggggcaga ctccgcagta aggagaatct ctcttgccct tttgtgtttc ttggtttctt 660
cctttgtaaa tacaaggcat agtctctgcc cttccccag attgccagaa gagtgggata 720
tattgttcta gcaatataaa gctctgaggc ctttctgcag gactgtagac accactttgc 780
tgtgatagtg aagaatgtgg gggagtgttg tgagggctag gcgaagcggc ccggccttgn 840
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aaaanaaaaa caatttttagc tggggcacaa tggctc 936
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<210> 244

<211> 1381

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1348)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1349)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1350)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1358)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1359)

<223> n equals a,t,g, or c

<400> 244

```
tccgtgggtg ggttgactct gaggatctgc ccctgaacat ctcccagaaa atgctccagc 60
agagcaaaat cttgaaagtc attcgcaaaa acattgttaa gaagtgcctt gagctcttct 120
```

152

```

ctgagctggc agaagacaag gagaattaca agaaattcta tgaggcattc tctaaaaatc 180
tcaagcttgg aatccacgaa gactccacta accgccgccg cctgtctgag ctgctgcgct 240
atcatacctc ccagtctgga gatgagatga catctctgtc agagtatggt tctcgcatga 300
aggagacaca gaagtccatc tattacatca ctggtgagag caaagagcag gtggccaact 360
cagcttttgt ggagcgagtg cggaaacggg gcttcgaggt ggtatatatg accgagccca 420
ttgacgagta ctgtgtgcag cagctcaagg aatttgatgg gaagagcctg gtctcagtta 480
ccaaggaggg tctggagctg cctgaggatg aggaggagaa gaagaagatg gaagagagca 540
aggcaaagtt tgagaacctc tgcaagctca tgaaagaaat cttagataag aaggttgaga 600
aggtgacaat ctccaataga cttgtgtctt caccttgctg cattgtgacc agcacctacg 660
gctggacagc caatatggag cggatcatga aagcccaggc acttcgggac aactccacca 720
tggtctatat gatggccaaa aagcacctgg agatcaaccc tgaccacccc attgtggaga 780
cgctgcggca gaaggctgag gccgacaaga atgataaggc agttaaggac ctggtggtgc 840
tgctgtttga aaccgccctg ctatcttctg gcttttccct tgaggatccc cagaccact 900
ccaaccgcat ctatcgcatg atcaagctag gtctaggtat tgatgaagat gaagtggcag 960
cagaggaacc caatgctgca gttcctgatg agatcccccc tctcgagggc gatgaggatg 1020
cgtctcgcat ggaagaagtc gattagggtta ggagttcata gttggaaaac ttgtgccctt 1080
gtatagtgtc cccatgggct cccactgcag cctcgagtgc ccctgtccca cctggctccc 1140
cctgctggtg tctagtgttt ttttccctct cctgtccttg tgttgaaggc agtaaaactaa 1200
gggtgtcaag ccccatctcc tctctactct tgacagcagg attggatggt gtgtattgtg 1260
gtttattttt ttttcttcat tttgttctga aattaaagta tgcaaaataa agaatatgcc 1320
gtttttatac aaaaaaaaaa aaaaaaannn ggggggggng ccccggtccc matttcccc 1380
c                                                                 1381

```

<210> 245

<211> 779

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (10)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (39)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (41)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (650)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (669)

153

<223> n equals a,t,g, or c

<400> 245

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cttttccttn caggtggaaa ggacccttg gtacccatnc ncaagcagtt aggaaaggac 60
ctggctcttt acatatattg gatggctctc atggcaaac ttctcaattc cttaattagt 120
catgtctcag cttcaaggat atcagacagg aatgaaacac acttgaaaat gagattgacc 180
tgagagatttt ttttccctaa tctctcatac ctttaattgga aaaataatca attaatctta 240
tgttaattag grtatacaaa gttcaccctc cttgmaagtg actagggcaa gccctgaaga 300
tcttcctcac ctccctttat ctttctataa ctttgtctcc tccagcacca cagggaagac 360
aatcacagtg ggtcaagagc gaccctcttt cacgtgggct ctgcatgacc tctgagacct 420
gcttatgatc agtgcaatga agttagaagt aactgatgat tgggagcctt tgcagatagc 480
tgggcaaatg ggtgatttac ttatcccat tctaaatgga gtgagctctc tttgaggcta 540
agcaaggagg cgttgatgac tagtttctag actttgcctg gagaccctt tggaaatctg 600
tcttcttttt aaactcaact aatatgcctt aatcatctgk gtgtaatggn agtcatccgc 660
tcctcaatnt aaccctyctm ccctggggct ttggctgtcc tcaatgagag tttcatgcag 720
aatggaaaat cctctatatg tacaatctct ctcccectca tttctcttcc tcctcacct 779
```

<210> 246

<211> 1231

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (795)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1219)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1229)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1230)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1231)

<223> n equals a,t,g, or c

<400> 246

```
ccacgcgtcc ggaagaaggc ctaattccta acctgggacc cagagagaga cataagatat 60
ccagagagat atgcaccaag aaactgcaat ttatacaaag acagtcagaa agcagctgaa 120
gacagaatga gagagaaact aagtaaaaga aacttgatgc ctccaaaatg aagagtatgc 180
```

154

```
ctcatttcca tatgtgaact gaaaagctct ccacttttga aataaaggct tactatagag 240
cagccctggg aatagaacta caagacttat aataacttcc tgtttgagtt gaaatgaaaa 300
ctcataaaga atctatgcta ttaacccccct aatttatact tttgtattct tttatgttgt 360
attttgtatt ttatgttgga cttctttttt aaaattttgt atttattttt aattgaaaaa 420
taattgtgta tacttattgt tgtacaacat gatgttttga tatatgtata tgttgtagaa 480
tgactaaatc aagctagtta acatatgcat tacctcctat acttatcatt tatttgtggg 540
gagaacattt aaaatctact ctgttagcaa ttttgaagta tagaatacac tatgtcaact 600
ataatcatgg tgttgtacag taggtctaaa tgtattcatt tctcctatct aactgaaaaa 660
ttgtatcttt tgaccaacat ctccctgggc cctccatctc ctccctggg aactaccatt 720
attttttttt ctttttttta aaaaaaagct tttagtttcg agggtagacg tgtaggtttg 780
ttatatagat aaacncaagt catgggactg tgttgtacag attattttgt cgtccacgta 840
ctaagcctag tgcccaatag ttattttttc tgctcttctc cctcctccta cctctgccca 900
tcaagttggc ctaatgtcta ttgttccctt ctttgaaca accactctaa tctctgcttc 960
taagggttcc tatgtctgac ttctttccct tgattttgtg agattcatcc acgttgtgta 1020
tgcagcagta gtttatttat ttccattatt ggatagtatt ctttgtgtg aacataaatt 1080
gctgatggca gatgtttgaa ttgtttccag tttttgagta ttatgaataa tgctgttgtg 1140
aacaaaaaaaa aaaaaaaaaa aaaaaaaggg cgcccgctct agaggatcca agcttgcgta 1200
cgcggtcatg aaacgtcana agggctctnn n 1231
```

<210> 247

<211> 851

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (817)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (834)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (842)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (844)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (849)

<223> n equals a,t,g, or c

<400> 247

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gcggacgcgt gggcgtggat cggctggagc ggggccgccg ccggctgcag caggagctgg 60
```

155

```

acgacgccac catggacctg gagcagcagc ggcagcttgt gagcaccctg gagaagaagc 120
agcgcaagtt tgaccagctt ctggcagagg agaaggcagc tgtacttcgg gcagtggagg 180
aacgtgagcg ggccgaggca gagggccggg agcgtgaggc tcggggccctg tcaactgacac 240
gggcactgga ggargagcag gaggcacgtg aggagctgga gcggcagaac cggggccctgc 300
ggctgagctg gaggcactgc tgagcagcaa ggatgacgtc ggcaagagcg tgcattgarct 360
ggaacgagcc tgccgggtag cagaacaggc agccaatgat ctgcgagcac aggtgacaga 420
actggaggat gagctgacag cggccgagga tgccaagctg cgtctggagg tgactgtgca 480
ggctctcaag actcagcatg agcgtgacct gcagggccgt gatgaggctg gtgaagagag 540
gcggaggcag ctggccaagc agctgagaga tgcagagggtg gagcgggatg aggagcggaa 600
gcagcgcaact ctggccgtgg ctgcccgcaa gaagctggag ggagagctgg aggagctgaa 660
ggctcagatg gcctctgccg gccagggcaa ggaggaggcg gtgaagcagc ttcgcaagat 720
gcaggcccag atgaaggagc tatggcgggg ggtggaggag acacgcacct tccgggaggaa 780
gatcttctcc cagaatcggg aaagtgaaaa gcgcctnaag ggcctgaagc tgangtgctg 840
cngntgcang a 851

```

<210> 248

<211> 1802

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1680)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1747)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1757)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1800)

<223> n equals a,t,g, or c

<400> 248

```

acgcgtccgc ttccatctgc tctggaatta aatatgcatt tcagggtgatt ggagagctac 60
attcccaact cgatggatcc gaagtactgc tgctgactga tggggaggat aacactgcaa 120
gttcttgtat tgatgaagtg aaacaaagtg gggccattgt tcattttatt gctttgggaa 180
gagctgctga tgaagcagta atagagatga gcaagataac aggaggaagt catttttatg 240
tttcagatga agctcagaac aatggcctca ttgatgcttt tggggctytt acatcaggaa 300
atactgatct ctccsagaag tcccttcagc tcgaaagtaa gggattaaca ctgaatagta 360
atgcctggat gaacgacact gtcataattg atagtacagt gggaaaggac acgttctttc 420
tcatcacatg gaacagtctg cctcccagta tttctctytg ggatcccagt ggaacaataa 480
tggaataattt cacagtggat gcaacttcca aaatggccta tctyagtatt ccaggaactg 540
saaaggtggg cacttgggca tacaatctty aagccaaagc gamcccagaa acmttaacta 600

```


156

```

ttacagtwac ttctcgagca kaaaaattct tctgtgcctc caatcacagt gaatgctaaa 660
atgaataagg acgtaaacag tttccccagc ccaatgattg tttacgcaga aattctacaa 720
ggatatgtac ctgttcttgg agccaatgtg actgctttca ttgaatcaca gaatggacat 780
acagaagttt tggaactttt ggataatggt gcaggcgctg attctttcaa gaatgatgga 840
gtctactcca ggtattttac agcatatata gaaaatggca gatatagctt aaaagttcgg 900
gctcatggag gagcaaacac tgccaggcta aaattacggc ctccactgaa tagagccggc 960
tacataccag gctgggtagt gaacggggaa attgaagcaa acccgccaag acctgaaatt 1020
gatgaggata ctgagaccac cttggaggat ttcagccgaa cagcatccgg aggtkcattt 1080
gtggtatcac aagtcccaag ccttccttgc ctgaccaata cccaccaagt caaatcacag 1140
accttgatgc cacagttcat gaggataaga ttattcttac atggacagca ccaggagata 1200
attttgatgt tggaaaagtt caacgktata tyataagaat aagtgcagt attcttgatc 1260
taagagacag ttttgatgat gctcttcaag taaatactac tgatctgtca ccaaaggagg 1320
ccaactccaa ggaaagcttt gcatttaaac cagaaaatat ctcagaagaa aatgcaacc 1380
acatatttat tgccattaaa agtatagata aaagcaattt gacatcaaaa gtatccaaca 1440
ttgcacaagt aactttgytt atccctcaag caaatcctga tgacattgat cctactccta 1500
ctcctactcc tactcctgat aaaagtcata attctggagt taatatttct acgctggtat 1560
tgtctgtgat tgggtctggt gkaattgkta actttatttt aagtaccacc atttgaacct 1620
taacgaagaa aaaaatcttc aagtagacct agaagagagt tttaaaaaac aaaacaatgn 1680
aagtaaagga tatttctgaa tcttaaaatt catcccatgt gtgatcataa actcataaaa 1740
ataattntaa gatgtcngga aaaggatact ttgattaaaa taaaaacact catggatatn 1800
ta

```

<210> 249

<211> 444

<212> DNA

<213> Homo sapiens

<400> 249

```

gggtgccttt ctcatggcca cagcagcttg gcttacaacc gtcttcaaac agccaggctg 60
tgccccagaa cttcactggg cttccttcca taactatgga tctgtgagca tcactttaat 120
ttcagagtgt ggaagacacc ttaataagaa tcatgaatca cattttacaa atcaggatata 180
acaggatgta aggttaagtg acctgtccta tcagggccac aaagccagtt aaacttcttt 240
attaactgag tcacttaaaa atcattttatt taaaaacctt ttttgttcca ggaactattc 300
tgggtactgg aaatraaaac agtggagaca gagagagggg aaataaaaaa caagacaaaa 360
atgattgctt tkgtggagtt tatatattcc actggargaa ggtagatsat aaataaaagt 420
gaaaaagtac attatwaggt ggga

```

<210> 250

<211> 1746

<212> DNA

<213> Homo sapiens

<400> 250

```

ggcatcagta aggtctgtat ttaaattgtg atgtagacat cataattacc aagacaagaa 60
attgttttga gaaattctct gatgtttttc ttcttcaggt ttcacgtgcc acgatcatgg 120
tgccacggta ctgcagtatg caccctaaaca gcaactccta atctcggggg gtaggaaaag 180
acacgtctgc atttttgaca tcargcaaag gcagctcatt cacacgttcc aggcccatga 240
ctcagctatt aaggctctgg ccttgatcc ctatgaggaa tattttacca caggttcagc 300
agaaggtaac ataaaggttt ggagattgac aggccatggc ctaattcatt catttaaaag 360
tgaacatgct aagcagtccta tatttcgaaa cattggggct ggagtcatgc agattgacat 420
catccagggc aatcggtctt tctcctgtgg tgcagatggc acgctgaaaa ccagggtttt 480

```

157

```

gcccaatgct tttaacatcc ctaacagaat tcttgacatt ctataaagat tgggggtttta 540
tttttatata catttcagtt aaaaggcaca ctacagtcac cactaggcaa ttctgctttc 600
taagcagttg tattgaaaac agagaatctc tgtgtagaat ttgaatatga cccaagctga 660
gtattatcta aacaggttgg tggaatgaat gcgcagtgtac cttattatgc tgacatacta 720
aaaaaaataa aacctagtat tgtatgaagg atagctattc ttacagcat ttagcaaacc 780
tgattcagaa aacatttgag attagcaaat tagtaacttg aaataatgaa aaggacgttt 840
ataccaaatt aaggaagaaa atggttgctga tttgggtttt tcttcctggt cttaccactg 900
actgaagcat gcctgcagtc tcctcctctg ttgaatgaag gataatcata aggtgtttgt 960
taggagcgtc agaccacctg gaaaacttct ttagctgtgg agcagtgcgc agtgaccagt 1020
tctctgctgt gagaggccgt ttccattctt tcctgctgaa tatttttcct gttagtgttt 1080
atactgagct agtactgtaa cttgcaaatt agtgcaaatt taaatgcaat gttttactca 1140
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gttaggaatg tactatgtga acatgacata tttgtagtta accaaacaca cttctctagt 1260
ccagtttagt actttttctt ttcgtgtatt caaggttaaa cacccaaaca tttaaggata 1320
tgttgaaact acaccaatag agcatttcat atcataatta aaatgaatgt taggcttctt 1380
gtggccagtt aatagttgat gagattggtg acattattta ttgccacagc ctattgtata 1440
aactatgcag agttaaatat ttgcttgtaa aatattagcc aatgttgtca ttattttgat 1500
gtatttcctt ggttatgacc aaaaatatgt tgagatactg aaactaatgt ctgtgtgttt 1560
aaatgtttac cagcaaattg tcttatcatg ttaatgagaa tgttcaatgc ctgtgtggta 1620
aatagtaaat acaatggcat aaaagtaact ttctctgaag atgtgatgtt caggctgtga 1680
aatatatatg taaaagaaaa ataaatgtta tttgttagaa aaaaaaaaaa aaaaaaaaaa 1740
ctcgta

```

<210> 251

<211> 1935

<212> DNA

<213> Homo sapiens

<400> 251

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gaattcggca cgaggaggca ttgcccgtca gacagcaact cagagaataa ccagagaaca 60
accagattga aacaatggag gatctttgtg tggcaaacac actctttgcc ctcaatttat 120
tcaagcatct ggcaaaagca agccccaccc agaacctctt cctctcccca tggagcatct 180
cgtccaccat ggccatggtc tacatgggct ccaggggcag caccgaagac cagatggcca 240
aggtgcttca gtttaatgaa gtgggagcca atgcagttac ccccatgact ccagagaact 300
ttaccagctg tgggttcatg cagcagatcc agaagggtag ttatcctgat gcgattttgc 360
aggcacaagc tgcagataaa atccattcat ccttcgcgtc tctcagctct gcaatcaatg 420
catccacagg gaattattta ctggaaagtg tcaataagct gtttggtgag aagtctgcga 480
gcttcggga agaatatatt cgactctgtc agaaatatta ctctcagaa cccaggcag 540
tagacttctt agaatgtgca gaagaagcta gaaaaaagat taattcctgg gtcaagactc 600
aaaccaaagg caaaatccca aacttgttac ctgaaggttc tgtagatggg gataccagga 660
tggtcctggt gaatgctgtc tacttcaaag gaaagtggaa aactccattt gagaagaaac 720
taaattgggt ttatcctttc cgtgtaaact cggctcagcg cacacctgta cagatgatgt 780
acttgctgta aaagctaaac attggatata tagaagacct aaaggctcag attctagaac 840
tcccatatgc tggagatgtt agcatgttct tgttgcttcc agatgaaatt gccgatgtgt 900
ccactggctt ggagctgctg gaaagtgaat taacctatga caaactcaac aagtggacca 960
gcaaagacaa aatggctgaa gatgaagttg aggtatacat accccagttc aaattagaag 1020
agcattatga actcagatcc attctgagaa gcatgggcat ggaggacgcc ttcaacaagg 1080
gacgggccaa tttctcaggg atgtcggaga ggaatgacct gtttctttct gaagtgttcc 1140
accaagccat ggtggatgtg aatgaggagg gactgaagc agccgctggc acaggaggtg 1200
ttatgacagg gagaactgga catggaggcc cacagtttgt ggcagatcat cttttctttt 1260
ttcttattat gcataagata accaactgca ttttattttt cggcagatct tcctcaccct 1320

```

158

```

aaaactaagc gtgctgcttc tgcaaaagat ttttgtagat gagctgtgtg cctcagaatt 1380
gctattttcaa attgccaaaa atttagagat gttttctaca tttttctgct cttctgaaca 1440
acttctgcta cccactaaat aaaaacacag aaataattag acaattgtct attataacat 1500
gacaacccta ttaatcattt ggtcttctaa aatgggatca tgcccattta gattttcctt 1560
actatcagtt tatttttata acattaactt ttactttggt atttattatt ttatataatg 1620
gtgagttttt aaattattgc tcaactgccta tttaatgtag ctaataaagt tatagaagca 1680
gatgatctgt taatttccta tctaataaat gcctttaatt gttctcataa tgaagaataa 1740
gtaggtatcc ctccatgccc ttctgtaata aatatctgga aaaaacatta aacaataggc 1800
aaatatatgt tatgtgcatt tctagaaata cataacacat atatatgtct gtatcttata 1860
ttcaattgca agtatataat aaataaacct gcttccaaac aacaaaaaaa aaaaaaaaaa 1920
aactttgagg gggggg                                     1935

```

<210> 252

<211> 1919

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (253)

<223> n equals a,t,g, or c

<400> 252

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ataaggcggc atttattcatt cccaccactg acatctactg tataccacat ctgctatgcc 60
atggatacat ggcattcatga tgatgagtc cccccctggg cctgccaaagg ggaaacagag 120
tgcatacccc accataatag ggaaattaat aattgtatta agtgggtgaa aaaaaggggg 180
aggatgttca ctcaactgttc cctgtgtagt atcctgcaaa tgcattgaatg gtgaactccc 240
catgtcagca ttnttgtgcc catttattta gtaccagac atagtgtctg tctcacagct 300
taatatattg taatgaataa attctgtctg tggatatgt tgatctgaac ttacaatgat 360
gggatataga attggcagag tggcagatgt tcacaattgt ctacaagtag atgtgctaga 420
caatggaagg atgcaggcca acctctttga ttacaattga gattcatgtg actattgagc 480
cctggaaatg tagcttgtcc aaattgagat gtgctgtcag tataaaatag ataccagatt 540
ttaaagatgt accaaaaaat gtaactatc tcaattttta tattggtgaa atcaatatgt 600
cttgggtatag tggcttaaat aaaacaattt tagcctttct cagtttattt ttctgcaaaa 660
agattaaaaa ttgtacatga agctcatgtt aactttcttt tggtcagtgc tattttaaag 720
gaagtatgag ttgaaaaaaa attgaaataa actatatcat attactagga cttaatatag 780
tggcataccc aggaaatgct tagtaagtgt tcccttcaca ttttaaaatt tgagtataca 840
atcatgtttg acaatataga aatttaattt ttagtgaaac aattctaaac cccttttcca 900
tagacacaag aaagatggca aatttatgct attcctggaa aaatacattg tggcttagca 960
aataagcaag tccccacgtt acttttgttt tgcttcaagt aatacttctg ccagtttgtgt 1020
tttatgaatt aaacagggaa cggcatgctg aacttgaaac tagatttgtt cctgcttttt 1080
tcacaatgtg agtagttttg aaaagtcaga tctggccatt tgtctttcct agaatagcat 1140
aactttgttc attgtttttt ttgtttgtct ttctgacaca gaaagactga tgatggtgtc 1200
cactatgtat tcttcaaaac atttggcaca tgctgcacta acctagtcta tcttttctat 1260
cttggaaatt gctcatacaa acctatagc ctgactaga tcccttacct tctctccagt 1320
tcctatcatt caccattttc actgtgcaag acacctcact agtcaccagt gatacagaaa 1380
tgacttttaa gcagttttctg ctcttaaggg cttaccgttt tgtctataag atacacaagt 1440
ataaatgaca agtacaaata acaatgaatg tttaatgctt tacgtttagt gttaagctt 1500
gttgttggaa gagcagcatt ttgacccttg gagaagaaaa actagctgtg gcattccagg 1560
tgagagaacct gacagaggac taagaagtta tctaattgtaa aagacctcag gcaccacctt 1620
cgcataaact ttttccagac aaggctaaat gtgcatgctt cataaccata attcttattt 1680

```

159

ttctttaata aatatttttc tacttgtaac actgtgcatt atttcaaact gtttacctgt 1740
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 attatgcctt aactatatct atagtattta acagtgaatc ctttgtataa tgaaagcatc 1860
 aacagataat tttaaattga taaataaaaa gcacagtttc aaatggtaaa aaaaaaaaa 1919

<210> 253

<211> 2468

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2076)

<223> n equals a,t,g, or c

<400> 253

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 tattaatgag atcctggta tgagggaaaa caagaacca aacattgtga attacttgga 180
 cagttacctc gtgggagatg agctgtgggt tgttatggaa tacttggtg gaggctcctt 240
 gacagatgtg gtgacagaaa cttgcatgga tgaaggccaa attgcagctg tgtgccgtga 300
 gtktctgcag gctctggagt tcttgcatc gaaccagata acccagagc agagcaaacg 360
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 tgggcccaag gttgacatct ggtccctggg catcatggcc atcgaaatga ttgaagggga 480
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 ccagaactt cagaaccag agaagctgtc agctatcttc cgggactttc tgaaccgctg 600
 tctcgagatg gatgtggaga agagagggtc agctaaagag ctgctacagc atcaattcct 660
 gaagattgcc aagccccctt ccagcctcac tccactgatt gctgcagcta aggaggcaac 720
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 gatgaaaata ttctattgga gtatgcctt cttttttctc ttctgttttt ctttcttttt 2040
 ctaatttttt atatgaaata atgagtaagt ttctnctga accatttgag agtggttaagt 2100

160

```

tgcagataga atgccccctt accactatat acctgaatgt gtattctttc yttttaaacac 2160
ttttatttta aatataaatt aagagaaatg ggccaaaacc atttgtattg tttaaagaat 2220
aattataaac acacttgat ccaccaaadc aagaaakgga aactgacag taagaacctt 2280
ctctatcttg tcttctcttt ctcatatag ccccccaccta agaggtaacc accatcttga 2340
cttttatttta aataactttc ttgcttttct gtatactttc atcacattca ggtgtgttcc 2400
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taaaaaaa 2468

```

<210> 254

<211> 2861

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2861)

<223> n equals a,t,g, or c

<400> 254

```

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ctggcggggt ggaatgtcgc ttccggcggt gccctgccat ggccctgggag ggggagccca 180
tgcgccacaa cctagggggc aacctggggg accccagagc ccgggctgtc tcagtgtccc 240
ttggcgggcg tgtggctcgc tttctgcagt gccgttctc ctttgcgggg ccctggttac 300
tcttcagcga aatctctctc atctctgatg tggatgaaca ttctctctcc gactggggag 360
gcaccttccc gccagccccc tgggtggcgc ctggccacc tcccaccaac ttcagcagct 420
tggagctgga gccagaggc cagcagcccg tggccaaggc cgaggggagc ccgaccgcca 480
tctcatcagg ctgcctgggt gccatcatcc tgcctctgt gctcatcatt gccctcatgc 540
tctggcggtc gactggcgc aggytctcga gcaaggytga acggaggggt ttggaagagg 600
agctgacggt tcacctctct gtccctgggg aactatcct catcaacaac cgcccaggtc 660
ctagagagcc acccccgtag caggagcccc ggctcgtgg gaatccgccc cactcygtc 720
cctgtgtccc caatggctct gcgttgctgc tctccaatcc agcctaccgc ctcttctgtg 780
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aggcytatat gagctgatgc ttcgggtgctg gagccgggag tctgagcagc gaccacctt 1920

```

161

```

ttcccagctg catcggttcc tggcagagga tgcactcaac acggtgtgaa tcacacatcc 1980
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caatggcacc tctgcccttc cctccccgac agcccatcac ctctaataga ggcagtgaga 2100
ctgcaggttg gctgggcccc cccagggagc tgatgccctt tctccccttc ctggacacac 2160
tctcatgtcc ccttctctgtt cttccttcct agaagccccct gtgcgccacc cagctgggtcc 2220
tgtggatggg atcctctcca ccctcctcta gccatccctt ggggaagggt ggggagaaat 2280
ataggataga cactggacat ggcccattgg agcacctggg cccactgga caacactgat 2340
tcctggagag gtggctgcgc cccagcttc tctctccctg tcacacactg gacccactg 2400
gctgagaatc tgggggtgag gaggacaaga aggagaggaa aatgtttcct tgtgcctgct 2460
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taatcacttg gggtttgtac atttttgggg ggagagacac agatttttac actaatatat 2760
ggacctagct tgaggcaatt ttaatcccct gcactaggca ggtaataata aaggttgagt 2820
tttccacaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa n 2861

```

<210> 255

<211> 766

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (107)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (709)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (722)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (732)

<223> n equals a,t,g, or c

<400> 255

```

aaaggggggtc gagtaactca agtggttagaa gttcggtgac ttttgactgg ggagaaagga 60
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cggaatggag gctacagccc gaaagccagg ccagcagtgg cgttcttctg tgtccccaag 180
tagtggactt gagcccgctg agacctcggc aggagtctcg tcccagggca ggtgggtgtg 240
cggggtgagc cgcggagcgg ttccagctcg ggtaaagagg aagttacctc gggtcctttg 300
cactccaact cggcggcgcc cgagcccgag gggccccagc caaccgacg cccgtgtgtt 360
gtgtgtgtct aacacccggt ccgtgcercg gccgcgccgc ccgcgtgcc cccagctcga 420
ggaggacatc gcggccaagg agaagttgct gcgggtgtcg gaggacgagc gggaccgggt 480

```

162

```

gctggaggag ctgcacaagg cggaggacag cctcctggcc gccgaagagg ccgcgccaag 540
gctgaagccc gacgtagctt ctctgaacag acgcatccag ctggttgagg aagagttgga 600
tcgtgcccag gagcgtcttg caacagcttt gcagaagctg gaggaagctg ataaggcagc 660
agatgagagt gagagaggca tgaaagtcag tgagagtcga gcccaaaang gatgaagaaa 720
anatggaaat tnaggagatc caactgaaag aggcaaaagc cattgc 766

```

<210> 256

<211> 1394

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1238)

<223> n equals a,t,g, or c

<400> 256

```

gccacgcgt ccgagctcag tcagcagaag agataaaagc aaacaggtct gggaggcagt 60
tctgttgcca ctctctctcc tgtcaatgat ggatctcaga aataccccag ccaaattctct 120
ggacaagttc attgaagact atctcttgcc agacacgtgt ttccgcatgc aaatcaacca 180
tgccattgac atcatctgtg ggttcctgaa ggaaagggtg ttccgaggta gctcctaccc 240
tgtgtgtgtg tccaagggtg taaagggtgg ctctcaggc aagggcacca ccctcagagg 300
ccgatctgac gctgacctgg ttgtcttctc cagtcctctc accacttttc aggatcagtt 360
aaatcgccgg ggagagtcca tccaggaaat taggagacag ctggaagcct gtcaaagaga 420
gagagcattt tccgtgaagt ttgaggtcca ggctccacgc tggggcaacc cccgtgcgct 480
cagcttcgta ctgagttcgc tccagctcgg ggagggggtk gagttcgatg tgctgcctgc 540
ctttgatgcc ctggattttg cccgwacagg tcaattgact ggcggctata aacctaaccc 600
ccaaatctat gtcaagctca tcgaggagtg caccgacctg cagaaagagg gcgagttctc 660
cacctgcttc acagaactac agagagactt cctgaagcag cgccccacca agctcaagag 720
cctcatccgc ctagtcaagc actggtacca aaattgtaag aagaagcttg ggaagctgcc 780
acctcagtat gccctggagc tcctgacggt ctatgcttg gagcgaggga gcatgaaaac 840
acatttcaac acagcccagg gatttcggac ggtcttgga ttagtcataa actaccagca 900
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cttgggtggt ggagacccaa agggttggag gcagctggca caagargctg aggcctggct 1080
gaattaccca tgctttaaga attgggatgg gtccccagtg agctcctgga ttctgctggt 1140
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atagctggag accattcttt ccaaagaact tacctctntc gcaaaggcca tttatattca 1260
tatagtgaac ggctgtgctc catattttac agtcattttg gtcacaatcg aggggtttctg 1320
gaattttcac atcccttgtc cagaattcat tcccctaaga gtaataataa ataattctta 1380
acaccaaaaa aaaa 1394

```

<210> 257

<211> 1329

<212> DNA

<213> Homo sapiens

<400> 257

```

ctcatcctca acctggtgac agacttgaag cccagatgc tgttgacac agtgccctgt 60
atccccgcct acatcctcta catgtgcatc cggctcgagg accaaaccaa tgatgatctc 120
aagggtcmct ccctgmtgac ctccaccayc aacggcatta agraagtcct gaaraagcac 180

```

163

```

artgatgact ttgagatgac gtcattctkg ttatccaaca cctgccacct tcttcaactgt 240
ctgaagcggg acagcgggga tgagggcttc atgactcaga atacwgcaaa gcacaacgaa 300
cactgyctta agaaytttga cctcaccgaa taccgctcagt actgagcgac ctttccattc 360
agatctacca gcagctcwtg aaaattgccg aggggyggtt acagccgatg atagtttctg 420
ccatgttgga aaatgagagc attcaggggtc tatctgggtg gaagcccacy ggctmccrga 480
agcrctcctc cagcatggca gatggggata actcatacyg cctggaagct wtcacccgcc 540
agatgaatgc ctttcatata gtcattgtgt accagggctt ggaccctgag atcatcctgc 600
aggtattcaa acagctcttc tacatgatca acgcagtgac tcttaacaac ctgctcttgc 660
ggaaggacgt ctgctcttgg agcacaggca tgcaactcag gtacaatata agtcagcttg 720
aggagtggct tcggggaaga aaccttcacc agagtggagc agttcagacc atggaacctc 780
tgatccaagc agcccagctc ctgcaattaa agaagaaaac ccaggaggac gcagaggcta 840
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aactacaaga gcggaatgac cctcagcaac tgctattaga tgccaagcac atgtttcctg 1020
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tcaatctgga attcctcaat gaagtctgaa gatgcatgtt tccagcatta gtttgattcc 1140
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taaaagtaga tcaaatcaga gattgacagc ctgtggaggg tgctgaacta tacagaatta 1260
gacacaacta tgtcattatt ttttgtacct actgctcaga ataaaaacac ttgaaatatg 1320
aaaaaaaaa                                     1329

```

<210> 258

<211> 2196

<212> DNA

<213> Homo sapiens

<400> 258

```

aattcggcag agcgggaagt cgctgaagac agagcgatgg tagttctgga ggcctcgctc 60
cggggccgac ccgaggccac agtgccctccg cggtagaccg gacttgggtg acgggctccg 120
ggctcccag gtgaagagca tcgggggctg agggatggaa gggctctaaga cgtccaacaa 180
cagcaccatg caggtgagct tcgtgtgcca gcgtgcagc cagcccctga aactggacac 240
gagtttcaag atcctggacc gtgtcaccat ccaggaaactc acagctccat tacttaccac 300
agcccaggcg aaaccaggag agaccagga ggaagagact aactcaggag aggagccatt 360
tattgaaact cctcgccagg atgggtgtctc tcgcagattc atccccccag ccaggatgat 420
gtccacagaa agtgccaaca gcttcaactc gattggggag gcatctgatg gcggcaccat 480
ggagaacctc agccgaagac tgaaggtcac tggggacctt tttgacatca tgtcgggcca 540
gacagatgtg gatcaccac tctgtgagga atgcacagat actcttttag accagctgga 600
cactcagctc aacgtcactg aaaatgagtg tcagaactac aaacgctgtt tggagatctt 660
agagcaaagt aatgaggatg acagtgaaca gttacagatg gagctaaagg agctggcact 720
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tggcggctcc tattccatca aaaccagtt taactctgag gagcagtgga caaaagctct 1440

```


164

```

caagttcatg ctgacgaatc ttaagtgggg tcttgcttgg gtgtcctcac aattttataa 1500
caaatgactt ttttccttag ggggaggttt gccttaaagg cttttaattt tgttttgttt 1560
gcaaacatgt tttaaattaa attcgggtaa tattaacag tacatgttta caataccaaa 1620
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gatgcttgaa atttaacact tttcacttgg ttcttatact gaatgccgac tctgctctgt 2040
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tgtaataaaa gatttgctgc agtctgaaaa ctgccaggg gtgcactgtt gggtttttct 2160
ttaaaataga gtactttgta ttctgggaaa aaaaaa 2196

```

<210> 259

<211> 567

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (236)

<223> n equals a,t,g, or c

<400> 259

```

gtttacataa gagatccttt agtccactca acggctgaca ttagcagcat ctttaataca 60
actgtttggt caaaggcaag gtggtcctt ttaaagttac acttctagac tcacctgttc 120
tcactccctg ttttaatgta acccagccat gagatgccag ataatagaat tgctacctac 180
tagctgaaca ggaaagaacc tgtgctgttt ctgacacttc ttgttgca tagatnaata 240
caatgggtat tatagagact cagttgcaga aattaacaaa catgctgctt ggttaaaatg 300
ggtagactca tctggctcat tctttattcc atttttagttg gtttgcactc tgcctaagg 360
gcatactcca aactyttggt attattctcc tgatagtcac actagtagtc tccctgggtg 420
gctataatct ctaaaagctt taaatgtttg cwtgcagcta tccatcgaat gtcaaagggt 480
ctctctttgg ctggaatgac aaaactcaaa ggaatgtgtg atcaggaaga catcataacc 540
tatgaatgat ggaacccaaa atgaatg 567

```

<210> 260

<211> 950

<212> DNA

<213> Homo sapiens

<400> 260

```

gactaatgaa ataactgttc actattgtgg gttctacttg cagggttcag actaggcaat 60
gtggtacatg ctatacaggc aactgagcag agcattcatg ccactgacct ggtacctcgc 120
ttatgcttaa cattagccaa cctgaaccgt gtgatttatt tcatctgtga caccatcctc 180
tggtgagga gcgtagggtc cacctctggc atcaacaaag agaaatggcg aacgagggct 240
gctcaccact actactatcc tcttctgctg agccttgtea gggatctgta tgaaatctcc 300
ctgcagatga aacgagttac atgtgacagg gcaaagaaag agaaatcagc atcccaggat 360
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ttattccgat ctctgaagca gcatectccc ttgctcctgg acacagtga gaacctttgt 480
gatatcctga accctttgga cctgctgggg atctataaat ccaatcctgg catcattgga 540

```

165

```
cttggagggtc ttgtgtcctc tatagcaggc atgatcactg tggcatatcc tcagatgaag 600
ctgaagaccc gttagtgttt ttaggccttg aactagtacc tactttaaaa gatggcctct 660
tggtgggaca gacatttcta taagtcacag gccatgtcat actgtgctta agttcttgtt 720
catgtgagca tttacaaccc tgtgatgtgg gcagagatga ggccaagaac ggagaaggga 780
ggagcatgaa gagttgtatg tttttggagt gctggagtga cttgtgaatt tctgaatatt 840
ttcccttcat ctaacattga ttgaacatct cttatgtgca tagtgggagc ttagtatttg 900
ctgaatgaat aaaaattgaa aggaaaaaat ttaaaaaraa aaaaaaaaaa 950
```

<210> 261

<211> 475

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (444)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (451)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (454)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (470)

<223> n equals a,t,g, or c

<400> 261

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tgccggcgctc ttggcgattc ggcccgcgca gctccgcttt cgctacagca tggtggccta 120
ctggagacag gctggactca gctacatccg atactcccag atctgtgcaa aagcagttag 180
agatgcactg aagacagaat tcaaagcaaa tgctgagaag acttctggca gcaacgtaaa 240
aattgtgaaa gtaaagaagg aataatctac cctgactaaa gcttgaaatg ctacatttcc 300
aaggtgaaga tgtgtgggca catgttatgg cagattgaaa aggatctcat tccatgggaa 360
aaaaaaaaat cctgtcttgt tcataaattg acaatgtcaa taaattgaaa tatggttcac 420
tgttaaaaaa aaaaaaaaaa aaangggggg nccnttttaa agaatccaan ttac 475
```

<210> 262

<211> 1244

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1230)

167

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tggaggctga gaaaaaacac aaacgatttc aggaacttga cagatttatg cactattata 660
caagatttaa aaaccatgag catagttatc agctagaaca acgccttctt aaaacagcca 720
aagaaaagat ggagcaattg agcagagctc tcaaagaaac tgaaggaggc tgtccagata 780
ccactttcat tgaagatgca gttcatgtgc tcttaaaaaac tcggcgcatt ctcaagtgtt 840
cttatccata tggatttttc ttggaacctt aaagcacaaa gaaagaaatt tttgaactaa 900
tgcaaacaga cctagaaatg gtcactgaag accttgccca gaaagtcaat aggccttacc 960
ttcgcacacc ccgccacaag atcatcaaag cagcatgcct tgtacagcag aagaggcaag 1020
aattcctggg catctgtggg ctcgggggag tagctcctgc agactcacca gaagcttcca 1080
aggcgcattt tgstggtggg aacatggggr ttgggggrata tttwgggggt tt 1132

```

<210> 264

<211> 499

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (447)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (466)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (467)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (469)

<223> n equals a,t,g, or c

<400> 264

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acactgcagt gtctgcgaca actgtgtgga acgatttgac catcactgcc cctgggtggg 120
caactgtgtg gggagacgga actatcgctt cttctacgcg tttattctct cctctctatt 180
cctgacggcc ttcactctcg cctgtgtggt caccacctg acgttgccgc ctcagggaag 240
caacttcctc tccactctga aggagacacc agcaagcgtg ctgggagttg gtgatctgct 300
tcttctccat ctggtccatt ctgggcctct cagggtttca cacgtacctc gtcgcctcca 360
acctgactac taatgaagac atcaaagggt cgttggtcca gcaagagggc ggtgagcctc 420
ttgtcaacc tacagcataa agtatnttca ccaatggcgg gtgggnntng ggccttaact 480
tccagctatt gacggggggg                                     499

```

<210> 265

<211> 735

<212> DNA

<213> Homo sapiens

168

<220>
<221> misc feature
<222> (648)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (713)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (730)
<223> n equals a,t,g, or c

<400> 265
ggagacacca ccattcctct cagcctgtgt ctgtctcaaa ggccccacct cacctcccct 60
aaaggcagcc gctgcagtcg ccacaccttt gccctgctg cgatgacctt gtcgccactt 120
ctgctgttcc tgccaccgct gctgctgctg ctggacgtcc ccacggcggc ggtgcaggcg 180
tcccctctgc aagcgtaga cttctttggg aatgggccac cagttaacta caagacaggc 240
aatctatacc tgcggggggc cctgaagaag tccaatgcac cgcttgtcaa tgtgacctc 300
tactatgaag cactgtgcgg tggctgccga gccttcctga tccgggagct cttcccaaca 360
tggtgtttgg tcatggagat cctcaatgtc acgctgggtg cctacggaaa cscacaggaa 420
caaawtktca ktggcaggtg ggagttcaag tgccagcatg gagaagagga gtgcaaattc 480
aacaaggtgg aggcctgctg gttggatgaa cttgacatgg agctagcctt cctgaccatt 540
gtctgcatgg aagagtttga ggacatggag agaagtctgc cactatgctg cagctctacg 600
cccaggctgt cgcagaacta tcatgagtgt gcaatgggac gcggcatnag tcatcacgca 660
acgccacgac agatctctca gcacaaagat atgtcctggt acgcaatgga acntgagata 720
accagtctan ctggt 735

<210> 266
<211> 851
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (834)
<223> n equals a,t,g, or c

<400> 266
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ccaggagcac agctgtgatg aacagtactt gtgtcagttc tgtgaacatg aaactaatga 120
tccagaagac ttgcatagcc atgtggtaaa tgagcatgca tgtaaattaa tagagttaag 180
tgataagtat aacaatggtg aacatggaca gtatagcctc ttaagcaaaa ttacctttga 240
caaagtataa aacttctttg tatgtcaagt atgtggtttt cggagtagac ttcacacaaa 300
tgttaacagg catgttgcta ttgaacatac aaaaattttt cctcatgttt gtgatgactg 360
tgaggaaaggc ttttcaagta tgctagaata ttgcaagcat ttaaattcac atttatctga 420
agggatttat ttatgtcaat attgtgaata ttcaacagga caaattgaag atcttaaaat 480
tcatctagat ttcaagcatt cagctgactt gcctcataaa tgtagtgact gcttgatgag 540
gtttggaaat gaaaggggaat taataagtca cttccagtc catgagacaa cttgattatt 600

169

```

ctctttaact tacagaatgt tagtttaaaa taataaattc atcctttttt tggagatgat 660
taaatggatg attgtaaaca caacttatga aatctgcctt taacaagtaa ctttttttaa 720
ttataaaatt ttattggcat tgctccattt tctgtatata aatatatctt taatgtggta 780
ttttcaaaaa aaaaaaaaaa aaaaaaatcc acgcggccgc gaattcccgg gtcnaacaag 840
ctcactaatc c                                     851

```

```

<210> 267
<211> 1257
<212> DNA
<213> Homo sapiens

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<220>
<221> misc feature
<222> (51)
<223> n equals a,t,g, or c

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```

<220>
<221> misc feature
<222> (118)
<223> n equals a,t,g, or c

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```

<220>
<221> misc feature
<222> (1213)
<223> n equals a,t,g, or c

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<220>
<221> misc feature
<222> (1217)
<223> n equals a,t,g, or c

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<220>
<221> misc feature
<222> (1238)
<223> n equals a,t,g, or c

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<220>
<221> misc feature
<222> (1245)
<223> n equals a,t,g, or c

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<400> 267
tcccggtgtt tgggtggatgt ggtggtcgcc aaagaagagt tagccattcc naccgcagat 60
tcaaattcga acaggccaaa gtttcagcct gtatattgcg cgcaatcatc agcggacncg 120
gtgatgaagt gatcgaactg gcgaaaacaa atgggctaagg taaaaagggg ggcatttccg 180
tcataataag gacatgccat gattgattta cgcagtgata ccgttaccgg accaagccgc 240
gccatgctcg aagcgatgat ggccgccccg gttggggacg acgtttacgg agacgaccct 300
accgttaatg ctctgcagga ctacgcagca gagctttccg gtaaagaagc cgccattttt 360
ctgcctaccg gcactcaggc caacctggtc gctctgctca gtcactgcga acgcggcgaa 420
gagtatatgt tcggtcaggc cgcgcataac tatctgtttg aagccgggtg cgcggcggtg 480
ctgggcagta ttcaaccgca acccatagac gcggctgccg acggcacgct accgctggat 540

```

170

aaagtggcga tgaaaatcaa acccgacgat atccatttcg cccgcaccaa attactcagt 600
ctggaaaaca cccacaacgg caaagtgttg ccgcggaat acctgaaaga agcatgggaa 660
tttaccgcg agcgcaatct ggcgctgcat gttgacggtg cgcgcatctt taatgccgtg 720
gtggcttacg gctgcgaact gaaagagatc acgcaatatt gtgattcgtt caccatttgc 780
ctgtcgaaaag gtcttgggac gccagtcggt tcattactcg tcggtaatcg tgattacatt 840
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gctgccgccg ggatatatgc cctgaaaaat aacgttgcg ctttgcagga agaccacgac 960
aacgctgcct ggatggcgga cagctgcgtg aarcargcg ggatgtgatg cgtcaggaca 1020
ccaatatgct gtttgttcgc gtcggggaag aaaatgctgc cgcgttaggc gaatacatga 1080
aagcgagaaa cgtgctgatt aacgcctcgc cgattgtccg cctggtgacg catcttgacg 1140
tctcgcgca acaactggcg gaagtcgccg cccactggcg tgcattcctg gcgcgttaag 1200
gagagaaacg ttncgcnaag cattttagtt ctccgtgnca attgntacat tgtcaac 1257

<210> 268

<211> 1085

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1067)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1081)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1083)

<223> n equals a,t,g, or c

<400> 268

gcaaaatttt agcatctctc aataatcata ctttttctct ttaattatca acaaaatatt 60
ttcatgttaa gctatctctt gcattcctag aataactcta cttgatcatg atgttttttc 120
ttttaataat ggaattataa ataagtatac agtttttgta tgaaaatgtt tttatttctc 180
tggagcatgt acctatggat ggaattacta aatcatatgc tagttctgtg tttactatt 240
tgaaggattg aaggagtgcc agattgtttt ccaaagtggc tgtaccattt tacattccta 300
cctgcagtgt atgaaggttt caatttctcc acatcctcac caatattatt atctgtcttt 360
ctgattgtag ccaccttagt ggggtgtgaag tggatatctt gtgacttggg tttgattttc 420
cctgatggct aatgatattg aacatctatc tttctctgtg cttattgggtc atttgatat 480
tttctttgga gaaatgtcta ttccagatcc yttttctgtt tttaaaaaat arctttattg 540
aggtwtattt gacaaataaa aatttgktgt atatttaaaa tgtatttaaa agaaaattga 600
gagaaaggac tacagagccc cgaattaata ccaatagaag ggcaatgctt ttagattaaa 660
atgaagggtg cttaaacagc ttaaagttta gtttaaaagt tgtagggtgat taaaataatt 720
tgaaggcgat ctttttaaaa gagattaaac cgaagggtgat taaaagacct tgaaatccat 780
gacgcaggga gaattgcgtc atttaagcc tagttaacgc atttactaaa cgcagacgaa 840
aatggaaaaga ttaattggga gtggtaggat gaaacaattt ggagaagata gaagtttgaa 900
gtggaaaact ggaagacaga agtacgggaa ggcgaagaaa agaatagaga agatagggaa 960
attagaagat aaaaacatac ttttagaaga aaaaagataa atttaaacct gaaaagtagg 1020

171

aagcaraara aaaaaaaaaa aaaaaaaaaa aaaaaagggc ggccgcncctg gggccccagc 1080
ntncg 1085

<210> 269
<211> 1315
<212> DNA
<213> Homo sapiens

<400> 269
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agaggaaacg gcgtggaggc tttgcagttc aggcgaagaa gccaaaaaga aacgaaatag 120
atgcggagcc gccagctaag cggcacgcca cagcagagga ggtggaggaa gaagagaggg 180
accggatccc aggcccggtt tgcaagggaa agtggaaaaa taaggaaacgg attctcatct 240
tttcttccag aggaataaat tttagaacaa gacatttaat gcaggacttg agaattgtga 300
tgctcatctc taaagcagat actaaaatgg atcgtaagga taagctatct gtgattaacg 360
aggtttgtga aatgaagaac tgtaataaat gcatctatct tgaagctaag aaaaaacagg 420
atctctatat gtggctttca aattcacctc acggaccatc tgctaaattc cttgttcaaa 480
atattcatac cctcgctgaa ctgaagatga ctggaaaactg tttgaaaggc tctcggtccc 540
ttttgtcttt tgacctgct tttgatgaat taccacatta tgctttgkta aaagaactct 600
taattcagat ctttagtaca ccacggtatc atcccaaaag ccaaccattt gtggaccacg 660
tgtttacttt caccattttg gataatagga tatggtttcg gaactttcag atcatagaag 720
aagatgctgc tcttgtagaa ataggacctc gttttgtctt aaatctcata aagattttcc 780
agggaagttt tggaggacca actttatatg aaaatcctca ctaccagtca ccaaactatgc 840
atcggcgtgt cataagatcc atcacagctg caaaatacag agagaaacag caagtgaag 900
atgtgcaaaa actgagaaag aaagagccga agactcttct tccacatgat cccactgcag 960
atgtttttgt aacaccagct gaggagaaac caatagaaat acagtgggta aaaccagagc 1020
caaaagtgtg tttgaaagca agaaagaaac ggattttaca aaggcaaaga aaaatgaaac 1080
agaggatgga cagtgggaaa acaaaataag tcaatggaaa cctgatttgt ttttcagtta 1140
cttttatatt attttgtatt caatgtgtaa atacttttat tatctaatac tatcttacgt 1200
ctaattagtg tagcattttac aagaaagaaa aattaagatc ttaaaatcag tgattatctt 1260
tttctaaata aaatatcacc agaattcatc agttaaaaaa aaaaaaaaaa aaaaa 1315

<210> 270
<211> 2959
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (2948)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2956)
<223> n equals a,t,g, or c

<400> 270
ccattccccg gtcgaccac gcgtccgctg gaaatttggg ttctccagaa ggtgggttcg 60
atgccatcat gcaagttgca gtttgtggat cactgattgg ctggaggaat gttacacggc 120
tgctggtgtt ttccacagat gccgggttcc actttgctgg agatgggaaa cttggtggca 180

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ttgttttacc aaatgatgga caatgtcacc tggaaaataa tatgtacaca atgagccatt 240
attatgatta tccttctatt gctcaccttg tccagaaact gagtgaaaat aatattcaga 300
caatttttgc agttactgaa gaatttcagc ctgtttacaa ggagctgaaa aacttgatcc 360
ctaagtcagc agtaggaaca ttatctgcma attctagcaa tgtaattcag ttgatcattg 420
atgcatacaa ttcccttttc tcagaagtca ttttggaana cggcaaattg tcagaaggmg 480
taacaataag ttacaaatct tactgcaaga acgggggtgaa tggaacaggg gaaaatggaa 540
gaaaatgttc caatatttcc attggagatg aggttcaatt tgaaattagc ataacttcaa 600
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aagtagaggt tattcttcag tacatctgtg aatgtgaatg ccaaagcgaa ggcatccctg 720
aaagtcctca gtgtcatgaa ggaaatggga catttgagtg tggcgcggtg aggtgcaatg 780
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gagagtgtga taatttcaac tgtgatagat ccaatggctt aatttggtgga ggaaatgggt 1020
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tgacaggttt gaaaatgtac aatatgtata atttttaaaa tgttttatta ttttgaaaat 1860
aatgttgtaa ttcattgccag ggactgacaa aagacttgag acaggatggt tattcttgtc 1920
agctaaggtc acattgtgcc tttttgacct tttcttctcg gactattgaa atcaagctta 1980
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acaaagtatt tgctgaatgg ggaccttttg agttgaattt attttattat ttttattttg 2520
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actttgagtt agtgccataa cagaccactg tatgtttact tctcaccatt tgagttgccc 2760
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tttacagtgc tatttactga agttatttat taaatatgcc taaaatactt aaatcggatg 2880
tcttgactct gatgtatttt awcaggttgt gtgcatgaaa tttttataga taaagragtt 2940
gaggaaanaa aaaaanaaa
2959

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<210> 271

<211> 2025

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1339)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1916)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1944)

<223> n equals a,t,g, or c

<400> 271

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gaggtttctt attttracaa gttaacttgt aaatactcag gttttacgat gtataattta 180
cctaatagac caaactaact catggagata ttttgaacta ttatttaggt acaaaacttta 240
taaagaatgt tagtatgtca taaaatataa cattacagct tattttaaaac caaatatagt 300
tgaacatatt taaaatacat tttcacagaa tggatgaatt agttgtttct tcagagttac 360
ttatgaacag ttgaatgctt taaaatgttc tgtctgtagg taacatctaa aacacaagtg 420
ggtttattta aattttttaa atttgaaatt ttttatttgc aaaaaattgt tttatgcttt 480
attatatcgc aaatgagtggt cagatttttg agtaccatg atcatgcttc catttttttt 540
agtttttaaac caccaaacca atatttttcc tttaaatttt aatcttataa tatagaaatc 600
ttatgtaaat gaaattttgt catgtttcaa ataaagagaa ctgaagtaga aaatagaaat 660
gccagtaaac aacataatgt ttaatttaca acttacatta ggggtttggg ggaatgctaa 720
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gaagtgatcc ctggtcatcc taataatggg atgagggag tttccagcag atttcagggt 1020
gttcttaaag tttttgttg tcatcttctc aatagtagat gaaatcaaga tgcttatgag 1080
catggaaatg tatttaaagt ttttgcttgt gtctcctca gtcagaatag aaaagtaact 1140
gaaatactct tacctttctg tccttgataa aatagtaaag aaaaccaaac aaaccaggc 1200
ctgatgggaa aaatgattcc tttattctag caacttactt tctgttggtg tgggaaatgt 1260
tattaatttc tattactaaa gtccatatca caaaatgata ttttaataata accttgggg 1320
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tctcattgcc aaattattag tgaatgtata gtccaggat tctttgagac acacagtatc 1440
attaatttcc gaattgtatt tcagtgttat tttttgttg tgaccactaa gcttctgtct 1500
taatacaaag ctgttacctt ctacagaatt taagtctgaa gatgtaaaga gagaacaggc 1560
cttgtgtaac agaagatact cttttttatg ctccctactg tgatcacaga aaaattaaaa 1620
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tatgagcaga atgagacaat cagttaaatc agaaatgaga agtattataa tgtaaaggcc 1740
ttgttttgct gtagcaataa aatgaccaag tgcaatgact tgatttaata aaatcatatt 1800
ttaaagtgc tgstatgaaw atttttggct ataaaatttt accctgactt gttttcaata 1860
actgttacgt aatgcagttt gatgttgtaa cctaacattc caaaaaaaaa attganaggg 1920
ggaatctcaa aatagtatat actncactaa cttgtttaca ggtgctgtat ttaaagcat 1980
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gcttctctct caaaaagaaa aattaaagga ttttattgcc aaacc

2025

<210> 272

<211> 852

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (767)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (769)

<223> n equals a,t,g, or c

<400> 272

ccaccgcgcca caaggcccag ctaatttttg tatttttagt agagacaggg tttgattatg 60
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gtgawgggac tatagacatg agccatcgtg cytggccttc ttgawtcttg aatacggggg 180
tttgaggtga aagcatttca tgaaaactta agttcataca caagagcatc atgaatattc 240
taaaagaggt atctgtgctt tttttgtgac cacaaaatat tacttcttat gaaatgttta 300
cactaggtga ggaaaagttc attaattacc tttaaaccgt tccttatttt ttttaagatt 360
ttaaattgta ttttggtctt tgcctccagt atcctttctg gttgctctgg tttgaattaa 420
gttcctatta tgctgcagca catatcaacc ttccctaagt aaccatttcc tggaatgtga 480
agcatcgggt ccattagcag accatatgca gaaatgtcgt gtacttgcac ttcttttttg 540
tgactcttat aaggctggtt gtgactcaga tcagcttaac tttttatatt atgttatttc 600
actaactgct acagtcaaaa tgatcaaata tttgtacaat agaaaattat ttaaatttta 660
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ttctgagttg gaattatatt tcttttttgt ggctaaatga ggttaancnt ttggaataaa 780
aaatgacttc aagttttcaa ttttttaaaa taacttaaaa atcttagcaa gggggaaact 840
tttttttaag gg 852

<210> 273

<211> 571

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (7)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (535)

<223> n equals a,t,g, or c

<400> 273

gccaantac tttccagccc agtaaggggt atttcaggag agcagtccac tkaaggttct 60

175

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ttccctttaa gatatgtgca ggatcaagtt ggggcacctt ttcagctgag taaccacact 120
ggccgcatca aggtgggtctt tactccgagc atctgtaaag tgacctgcac caagggcagc 180
tgtcagaaca gctgtgagaa ggggaacacc accactctca ttagtgagaa tggtcátgct 240
gccgacaccc tgacggccac gaacttccga gtggtaattt gccatcttcc atgtatgaat 300
ggtggccagt gcagttcaag ggacaaatgt cagtgcctc caaatttcac aggaaaactt 360
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ggcaaggcat tggggacgca tgtcatccat tcaacacata ccttgccctc gaccgtgact 480
agccagcagg agtcaaagtg aaatttcctc cttaacatag tcaatatcca tgtgnaacat 540
cctcctgaag cttccgtcca gatacatcag g                                     571

```

<210> 274

<211> 710

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (667)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (689)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (701)

<223> n equals a,t,g, or c

<400> 274

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cctttctgtg gatgattatg cagctgggcc atgatttcac acccgggggc catgggctaa 180
gatggagggg aaggaaggaa tgtaatgtgt gccctctacc tcttcaccag gcacatccct 240
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caagatggag actgaggccc acgcttgagg tccccggagc tccccgggca catccaggaa 420
ggaccttgct ttgggacctt acacacttcg gctctctgga cacttgcgac acytcaaggt 480
gttctctgta gctcaatctg caaacatgcc aggcctcagg gatcctctgc tgggtgcctc 540
cttgcccttg ggaccatggc caaccagag ccatccgatt cgatggatgg ggatgcactc 600
ttcagaccaa gccagcagga attccaaagc tgcttgctgt aaatgtgtga gattgtgaat 660
gggctgnatt ctggattcaa aaccagccng ctggtggggc ntaagggttg                                     710

```

<210> 275

<211> 595

<212> DNA

<213> Homo sapiens

<400> 275

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taaaagagtg tcctaacagt ccccgggcta gagaggacta aggaaaacag agagagtgtt 60

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176

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acgcaggagc aagcctttca tttccttggt gggggagggg ggcggttgcc tggagagggc 120
cggggtcggg gaggttgggg ggtgtcagcc aaaacgtgga ggtgtccctc tgcacgcage 180
cctcgcccgg cgtggcgctg acactgtatt cttatgttgt ttgaaaatgc tatttatatt 240
gtaaagaagc gggcggtgct ccctgctgcc cttgtccctt gggggtcaca cccatccccct 300
ggtgggctcc tgggcggcct gcgcagatgg gccacagaag ggcaggccgg agctgcacac 360
tctccccacg aaggatatct tgtgtcttac tctgtgcaaa gacgcggcaa aaccagtgct 420
cctgggtttt cccacccga gatgaaggat acgctgtatt ttttgcctaa tgtccctgcc 480
tctaggttca taatgaatta aaggttcatg aacgctgcga aaaaaaaaaa aaaaaaatt 540
tgccctatca gtgagtcgga ttaattgtcc gcgcggccgg acatttagta gtagt 595

```

<210> 276

<211> 1172

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (119)

<223> n equals a,t,g, or c

<400> 276

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tactatttat agcttttagat agggcctccc ttccctcttt ctttctttgt tctctttcat 60
taaacccttt cccagttttt ttttttact ttaaaccctg ctctcatgg ccttggccnt 120
ttctgaagct gcttctcttt ataaaatagc ttttgccgaa acatagtttt tttttagcag 180
atcccaaat ataataaggg ggatgggtggg atatttgtgt ctgtgttctt ataatatatt 240
attattcttc cttggttcta gaaaaataga taaatatatt tttttcagga aatagtgtgg 300
tgtttccagt ttgatgttgc tgggtggttg agtgagtga ttttcatgtg gctgggtggg 360
tttttgcttt tttctcttgc cctgttctct gtgccttctg atggggctgg aatagttgag 420
gtggatggtt ctaccctttc tgccttctgt ttgggacca gctggtgttc tttggtttgc 480
tttcttcagg ctctagggtt gtgctatcca atacagtaac cacatgcggc tgtttaaagt 540
taagccaatt aaaatcacat aagattaaaa attccttctt cagttgcact aaccacgttt 600
ctagaggcgt cactgtatgt agttcatggc tactgtactg acagcgagag catgtccatc 660
tgttggacag cactattcta gagaactaaa ctggcttaac gagtcacagc ctcagctgtg 720
ctgggacgac ccttgtctcc ctgggtagga ggggggggaa tgggggaggg ctgatgaggc 780
cccagctggg gctgttgtc tgggaccctc cctctcctga gaggggaggg ctggtggctt 840
agcctgggca ggtcgtgtct cctcctgacc ccagtggctg cggtgagggg aaccaccctc 900
ccttgctgca ccagtggcca ttagctcccg tcaccactgc aaccagggtt cccagctggc 960
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ctgtaggcac ctctcacact gttgtctgtt actgattttt tttgataaaa agataataaa 1080
acctggtact ttctaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1140
aaaaagggcg gccgctcgcg atctagaact ag 1172

```

<210> 277

<211> 780

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (161)

<223> n equals a,t,g, or c

177

<220>

<221> misc feature

<222> (773)

<223> n equals a,t,g, or c

<400> 277

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cgcgagacaag gccaggctag ccttgagctc cgtcggggcag ggcgcgggga ttggtgtccg 60
gcagagcgtg agccagcggg gcgamgtcgg cgagcggggag tgaaagaaga aaagctagag 120
agcgaaggca aagccgagga gagagggccg cggtcggcga nggaatctga ctgcacgggt 180
gcgtgcgctc acttcgggag gctccctcag scgggcgggt ccgstagtgg ctaaaggcaa 240
agcattccgg ggcgcggcgc atgaagttga gcttcgtccc tgetagccgc cgctttctcc 300
ccaaaaatac atcctagcct taatgtttat gcctccattg cccagttct tatctgtttt 360
gctcaatgtc tcatagctac aagaaggcaa tttctgacga agccctccgt sccttccaaa 420
tggattatth tggcgggctt ycaccgggac agtatgccac ccgaatgact ggacaagtgc 480
acgggagcgg ctgtcatttg cggagtgcgc cttgcgatct aggcgcctca cagcgmaayt 540
atccagtaat ttctctgaaa tcgatgctgg tttgttttcc caaggcaaat cagcagctta 600
tacagacatt ggggccacaa agccggtgga acaacgggag acggcttcct gagtgtcagg 660
tcctccaaga tgagcttaaa mttcgggtgg tgggcaggyt cgtaggcggg aaaggscgt 720
gtccagatgr atgcaktcca tgtatatatt gatgaaagac acgtatacca ttnggtcaag 780
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<210> 278

<211> 2375

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (9)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (920)

<223> n equals a,t,g, or c

<400> 278

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cggcagcgna ccaagatggc ggcgcctctgt gagggacaag cgtttgccgt aggggtgaaa 60
agaattgggg tgcagtagtt cgctccccag aagggaaccc ccagaaaatc cggcagctga 120
tagatgaggg gattgccccg gaagagggag gcgtggacgc gaaggacacg tctgccacat 180
cccagtcagt taatggatca cccaagcgg aacaaccttc attggaatct acaagcaaag 240
aagccttctt tagcagagtg gaaacatttt cttctttgaa atgggcagggt aagccctttg 300
agctgtctcc actcgtctgt gcaaaatatg gctgggtcac agtggaatgt gatatgctca 360
agtgtcttag ctgtcaagct tttctctgtg ccagtttaca accagctttt gactttgaca 420
gatataagca acgatgtgct gagctgaaga aagccttggt tactgcccac gagaagttct 480
gtttctggcc agacagccca tcccagacc gatttgggat gttgccctg gatgagcctg 540
ctattcttgt tagtgaattc ctagatcgtt ttcaaagcct ttgtcacttg gacctccagc 600
ttccttccct aaggccggag gacttgaaaa ctatgtgctt gacagaagac aagatcagtc 660
ttctcttaca cttgcttgaa gatgaacttg atcaccgaac tgatgagaga aaaactacaa 720
tcaaattagg ctcagacatc caagtcacg tcaactgcctg tattctctct gtgtgtggct 780
gggcgtgtag ttctctttg gaatccatgc agctctccct gatarcatgt tcgcaatgta 840
```

178

```

tgargaargt ggggctctgg ggcttccage agattgaatc gtccatgact gacctggatg 900
catcttttgc tgaccagctn cccaatccca ggccttgagg ggcgaccaga gcgcttacct 960
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tgcggaagc aagcragctc gcctctgctc ctccagcagt tcggacacat cttcccgaag 1260
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caagactcgt tgcttttggg ggatcatcag tttttgtggg agagaagggt gacctgaac 2280
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```

<210> 279

<211> 2461

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (14)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1164)

<223> n equals a,t,g, or c

<400> 279

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acagcctgga atgagtttgc ttattaccca gtcactttcg tagtgaatgt tcaaacccca 180
aagcaaattg ttgcatctcc ttgtccataa aggagaaagc caggttatag gagaaagaga 240
gagaaaggcg catgtctgtt tgcacagaga gaggcaattt tgtctacctt tcgagaatca 300
gttataaaca gaagggcctc ttaggatttt gagctctcct gacaatgaag gaaaagctct 360
cttgagtata caagttccac actcattacc tttcagtggt gacccatcac ccactacaat 420
ttgttgaagg aaggagtggt cagagatatg ctttaaagtt gtactttagg ctgaaattct 480

```

```

ctctgtatatt ggacctgcag atgtttgtgta cagaaccgat gcatggcagg gtcaggaagc 540
taggagagtg aaggcgcttg tggagacagc tctgtagcaa atgaaacacg gaagcctccg 600
ggaatgtgtt tgtgtcacca gcagcaggca tttccctgtc ctccccaccc ccagtctcca 660
catccccagc agcctcttcc agaagcatgt cagggagacg gacagggtgt ctccttctcg 720
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t 2461

```

<210> 280

<211> 2520

<212> DNA

<213> Homo sapiens

<400> 280

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aaaagaagaa cgcctgtcca tcgccttttt ataagtcctt ctctccacac ctaaaagcag 180
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acaagccatg tagcctctct gtgcctattt cttcatgcat aaactgggac tcataatatt 540
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acagttcaac acttttgaaa aatgacatga attttcatta aaaacccttt tcctatgttt 2460
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<210> 281

<211> 1448

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1427)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1432)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1440)

181

<223> n equals a,t,g, or c

<400> 281

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ccaagttccg gccagttcga cctcgaggat ccagaggtgg agacgggtact acctcccagc 120
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taccctattc acgctctgtg cttgtgccaa gggggcaatg gcggcttcct gtgttctact 360
gcacactggg cagaagatgc ctctgattgg tctgggtacc tggaagagtg agcctgggtca 420
ggtaaaagca gctgttaagt atgcccttag cgtaggctac cgccacattg attgtgctgc 480
tatctacggc aatgagcctg agattgggga ggccctgaag gaggacgtgg gaccaggcaa 540
ggcgggtgct cgggaggagc tgtttgtgac atccaagctg tggaacacca agcaccaccc 600
cgaggatgtg gagcctgccc tccggaagac tctggctgac ctccagctgg agtatctgga 660
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cagcttcttg gcctcccttc cagctctgca gctaattgagg tcctgccaca acggaaagag 1380
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caagggaa 1448
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<210> 282

<211> 827

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (725)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (800)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (814)

<223> n equals a,t,g, or c

<220>

<221> misc feature

182

<222> (815)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (817)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (819)

<223> n equals a,t,g, or c

<400> 282

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gcgagcgct gggcgagcgt gtgggtccaa gggaccccaa agctccaggc cagtttgggc 60
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acttcaatgt ctaccttagc gatttgatcc cagtggatag agccattgaa gacaccagac 180
ctgctggatg tgcagagcag ctagtgcaca ataacctccc aaccaccagt gtcacatcat 240
gctttgtgga tgaagtgtgg tccactctcc tgagatctgt tcacagtgtc atcaatcgct 300
ctcctccaca cctcatcaag gagattctgc tggtagatga cttcagcacc aaagactatc 360
taaaagataa tttggataaa tacatgtccc agtttccaaa agttcggatt cttcgctctc 420
aagagagaca tggcttaata agggccaggc tggcaggagc acagaatgca acaggtgatg 480
tggtgacatt tttagattct catgtggaat gtaacgttgg ttggttgga cctcttctgg 540
aaagagttta ttttaagtaga aagaaagtgg cctgtccagt aatcgaagtc atcaatgata 600
aggatatgag ttacatgaca gtggataact ttcaaagagg catctttgtg tggcccatga 660
actttggttg gagaacaatt cctccagatg tcattgcaaa aaacagaatt aaagaaactg 720
atacnataag gtgcctgtgc atggctgggt ggattgggtt ctattgccaa aagttacttt 780
ttttgaactt ggaacatacn aaccttggc cttnnangnt ttggggg 827
```

<210> 283

<211> 524

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (518)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (524)

<223> n equals a,t,g, or c

<400> 283

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gatcaggcca ttggcctcct cgtggccatc ttccacaagt actccggcag ggagggtgac 120
aagcacaccc tgagcaagaa ggagctgaag gagctgatcc agaaggagct caccatkggc 180
tcgaagctgc aggatgctga aattgcaagg ctgatggaag acttggaccg gaacaaggac 240
caggaggtga acttccagga gtatgtcacc ttctggggg cttggcttt gatctacaat 300
gaagccctca agggctgaaa ataaataggg aagatggaga caccctctgg gggtcctctc 360
```

183

tgagtcaa at ccagtgggtgg gtaattgtac aataaat ttttgggtcaa atttaaaaaa 420
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 480
aaaaaacaaa aaaaaaaaaa aaaaaaaaaa aaaaaaanac aan 524

<210> 284

<211> 613

<212> DNA

<213> Homo sapiens

<400> 284

cctcactaaa gggaacaaaa gctggagctc caccgcggtg gcggccgctc tagaactagt 60
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cgtagaagac gccctcacct atctggacca ggtgaagatc cgctttggca gcgaccctgc 180
cacctacaac ggcttcctgg agatcatgaa ggagttcaaa agccagagca tcgatactcc 240
tggagtcac agacgtgtct cgcagctctt ccacgagcac cctgacctca ttgttggtatt 300
caacgctttt cttcccctcg gatatagaat agacattccc aagaatggca agttaaacat 360
acagtcgcct ctgacaagcc aggagaattc gcacaaccac ggggacggtg cagaggactt 420
caagcagcag gtgccgtwta aagaggacaa accccagggtg cccctggagt ccgattccgt 480
ggaattcaac aacgccatca gctatgtgaa taagattaaa acccgcttct agaccacca 540
gaaattacag gtcattcctg gagatctgca cacstwccar aargarcarc tgaacacgag 600
gggccggcca ttc 613

<210> 285

<211> 533

<212> DNA

<213> Homo sapiens

<400> 285

ggcacgagsg gcgggaacac gcggggccca agatggcggc cagccggtac cggcggttttc 60
ttaagctctg tgaggaatgg ccagtggacg agaccaaacg gggccgggac ttgggcgctt 120
acctgcgaca gcgggtagca caggcctttc gggagggaga gaatacccag gttgcagagc 180
ctgaggcctg tgatcagatg tacgagagct tagcgcgact ccattcaaac tactacaaac 240
acaagtaccc tcgcccaga gacaccagct tcagtggcct gtcgttgga gagtacaagc 300
tgatcctgtc cacagacacc ttggaagagc ttaaggaaat agataaaggc atgtggaaga 360
aactgcagga gaagtttgcc cccaagggtc ctgaggagga tcataaggcc tgagctcagg 420
ccttacctcg tgcacatacc taggtgtgga gtcttgtaca ttgccatcgt caataaaact 480
gccccagttt ccccttgaaa aaaaaaaaaa aaaraaaaaa gaaaaaagtc gac 533

<210> 286

<211> 2071

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (303)

<223> n equals a,t,g, or c

<400> 286

caagcggaaa ataatgatca agcggcacga ggtggagcag cagaacattc gggaggaact 60
aaataaaaag aggaccacga aggagatgga gcatgccatg ctaatccggc acgacgagtc 120

```

cmcccgagag ctagagtaca ggcagctgca cacgttacag aagctacgca tggatctgat 180
ccgttttacag caccagacgg aactggaaaa ccagctggag tacaataaga ggcgagaaag 240
agaactgcac agaaagcatg tcatggaact tcggcaacag caaaaaaact taaaggccat 300
ggnaatgcaa attaaaaaac agtttcagga cacttgcaaa gtacagacca aacagtataa 360
agcactcaag aatcaccagt tggaagttac tccaaagaat gagcacaaaa caatcttaaa 420
gacactgaaa gatgagcaga caagaaaact tgccattttg gcagagcagt atgaacagag 480
tataaatgaa atgatggcct ctcaagcgtt acggctagat gaggctcaag aagcagaatg 540
ccaggccttg aggctacagc tccagcagga aatggagctg ctcaacgcct accagagcaa 600
aatcaagatg caaacagagg cacaacatga acgtgagctc cagaagctag agcagagagt 660
gtctctgcgc agagcacacc ttgagcagaa gattgaagag gagctggctg cccttcagaa 720
ggaacgcagc gagagaataa agaacctatt ggaaaggcaa gagcgagaga ttgaaacttt 780
tgacatggag agcctcagaa tgggatttgg gaatttgggtt acattagatt ttcctaagga 840
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tggagacagt tttacaaaaa ccaataaacc aacaacaaaa aaagtggatg tatattgctt 1200
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taaagattga aaatttgata catttttacag aaactaattg tgatgtacat atcagtgggtg 1440
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aagaacctgc tggcaagagt ttaacttgtc ttcagcatat tctgattgta tcataatcat 1560
tttctgctgt tgcagaggat gtgaatacac ttaaggagct cacagaatcc cagtagcaca 1620
aattgggctt tggcaaatcg tgtattttgt gtatagaagg aatttaagga gaggtattac 1680
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cagatcatct tgatcttttt ctttatctcc cttccccttc ctaagtccca tttcttggtc 1860
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aaaaaaaaaa ggctttactt cttttgcatg cactttaaaa acaaaaacaaa acatttttca 1980
ggttccaagg aaragcatga taactgtcag agcttttaat tatatttgta aataaaaagtg 2040
ttcatcacia aaaaaaaaaa aaaaaaaaaa a
2071

```

<210> 287

<211> 1966

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (56)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (788)

<223> n equals a,t,g, or c

<220>

<221> misc feature

185

<222> (1753)

<223> n equals a,t,g, or c

<400> 287

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gaactagtct cgagtttttt ctgtctagct cgcaccggct gaggcggcgc ggcagnngag 60
ggacggcagc ctgcrcggc tactgcagca ctggggtgtc agttgttggc cgcaccaga 120
acgcttcagt tctgctctgc aaggatata aataactgat tgggtgtgcc gtttaataaa 180
agaatatgga aactgaacag ccagaagaaa ccttccttaa cactgaaacc aatggtgaat 240
ttggtaaacy ccctgcagaa gatattggaag aggaacaagc atttaaaaga tctagaaaca 300
ctgatgagat ggttgaatta cgcatctctgc ttcagagcaa gaatgctggg gcagtgattg 360
gaaaaggagg caagaatatt aaggctctcc gtacagacta caatgccagt gtttcagtcc 420
cagacagcag tggccccgag cgcattattga gtatcagtgc tgatattgaa acaattggag 480
aaattctgaa gaaaatcatc cctaccttgg aagagggcct gcagttgcca tcaccactg 540
caaccagcca gctcccgctc gaatctgatg ctgtggaatg cttaaattac caacactata 600
aaggaagtga ctttgactgc gaggtagggc tgttgattca tcagagtcta gcaggaggaa 660
ttattggggt caaagggtgt aaaatcaaag aacttcgaga gaacactcaa accaccatca 720
agcttttcca ggaatgctgt cctcattcca ctgacagagt tgttcttatt ggaggaaaac 780
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gaacacagga ccagatacag aatgcacagt atttgctgca gaacagtgtg agcagtwma 1560
gwttagcttt gtgttagctt atacatacta aaacctttaa aaagcttttc ttctcaattg 1620
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gctgccaaaa ccacttgcta aaaattgtac agagcctgta ggaaaatata gaaggttcca 1860
ttgggatgtt ggcctagtgc tgtgtgggaa gacttagtgg attttgtttg tttttagata 1920
actaaatcgg ccaacaaatc accgttcttg cctatgggac cggggcc 1966

```

<210> 288

<211> 869

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (869)

<223> n equals a,t,g, or c

<400> 288

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gctctggcgg gcataccagc gggccctggc cgctcaccgc tggaaagtac aggtctgtac 60
agctgggccc tgtggttaga ggctggtaca aggttttggg tcggttcac cctggcacca 120

```

186

```

ccaaagtgga tgcactgaag aagatgttgt tggatcaggg gggctttgcc cctgtgtttc 180
taggctgctt tctccactg gtaggggcac ttaatggact gtcagcccag gacaactggc 240
caaactacag cgggattatc ctgatgccct tatcaccaac tactatctat ggctgtgtgt 300
gcakttagcc aacttctacc tgggtccccct tcattacagg ttggccggtg tccaatgtgt 360
tgctgttate tggaactcct acctgtcctg gaaggcacat cggctctaag cctgcctcac 420
tccatcgttt ccaccttgca gtgatgcagc ttgacctgga aacggtcaga caacctcctc 480
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accctgcaat gcccctcttc actctaaaat gtacactgac tgcttttagag cccttgataa 600
tagtcttatt cccaccacat actaggcact ccataaatat ctggtgaacc ttcattgacct 660
tatcaacttt acaccatat cccagcaaat gccactcatc cccactcttc atagacacat 720
ttgttactct aacctgcct aggcctcttg tagctccagc tcttttagaga ctcccggaa 780
cctttatatg gtgcctcagt aaatatgtta ttaaatatgt aatccggaaa aaaaaaaaaa 840
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa 869

```

<210> 289

<211> 1105

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (34)

<223> n equals a,t,g, or c

<400> 289

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cagaatgtat tcggcagaaa agggactcag gtangcccag cctgggactg agagcagaaa 60
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accatctca gcatggcttt gatattctct acttcctggc ctttaaaaat gacctataat 180
ttttcagttt gctttactat attttataaa gaaaattcta tcttatggtt gattgagcat 240
tgagacttat gaaggcatta ggatagatag ctcaggaatg taaagggttca gaaaagggtc 300
gttttctcag attaacaaat atgatggatt ccatggctga ccttggtgct taaaccagga 360
ggtttcaatc tagtcctaga gttgtgtccc tctgaaaggc ccaatgccat gtaactaact 420
ttaaactgga tatatacttt gagccttact taattcacag ataagttgac ttaactcagt 480
atttttattt caattaatga aaacagtcct cttttcaacc ccagggttgct tacattttgc 540
tggctcctcc aagtgacct tgggtggagac caattaatga aggaatgaaa ttcactttat 600
tgggactgtg gtattcaaca gagccacact taaccacttt ttccaatgaa gaatctccag 660
aatgataatg cccaaatatg gatggccaar aagaatttgt atctacggtg tgctttatgt 720
gtttttgaca ctgctgtatt ctgtgtgac aagtgatttg sagctgggtc caatgtkact 780
gagtgttctc aaaratttct agtaactaag tcaacttaat tttcttaagc ctggtattac 840
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cgagggttgg gatgagagcc tacttcctac ctcttaaggc actttcctca ttatittgcc 960
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agcaaagtat atgaccattt tgaatagagg ttagtggaaa ggaaaatgta gaggttttaa 1080
gttcagagg tacaaacctc caata 1105

```

<210> 290

<211> 1982

<212> DNA

<213> Homo sapiens

<400> 290

187

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tggatcccc gggctgcagg aattcggcac gagcagagac gtggaggcgt gagggagaac 60
atgcttggtta aatattgcagg tagattagga gacaccaaac agagattcag acacagtaag 120
gctgggatga gatectcgaa gctgtgtttt aacaaactcc actggagagt cccatattcc 180
ctcaaatttg ggaatcacga ccctgaacca ggttgggcct gaagcagtca actgaattca 240
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atgtgatatt ttagtatttt ggtgtaaaag ccaacaggca aactttgccg ggtactgtgt 480
agaaactcga aaatgtgagg ccagtttgta cagttcagag gaaatgcttt aacgtagaat 540
cagatagctg gaagagatct tcgagggaaa gtaagttccc taaagtcaca tctatgtctc 600
ctagctcagt gttctttgtc attgtgtgtg tgtgtgtgtg tgtgtgtgtg tgtgtgtgat 660
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ttcaaagtaa atctattgat ttctagtaat catatktgaa tcaatgttaa agcatatata 780
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gatatcatct taccagttta tttggtaaaa acaaacagtt atttggtatt tgtcagaatt 1020
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attttattat tagattttgt atggtgattt taggctatga aaacatgac atttatatgta 1380
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tgagagagaa taaaggttat gtttgtctta ctttgttat cgagtttgct gaattctttt 1680
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tttacattgc agcaagaaaa ccatctttta tagtaacatt cagttaaaat gaactcaatt 1800
cattgttaac ttccataaac agaatttgaa ctttatcaac ctcaacgtgt atataaacta 1860
gatagtcctc aatactttat caacctcaac atgtatataa actagatagt cctcaaatac 1920
tgtttgaatt taataaatgt caatttaaaa attttaaaaa aaaaaaaaaa aaaaaaaaaa 1980
aa

```

<210> 291

<211> 2329

<212> DNA

<213> Homo sapiens

<400> 291

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caaggcgctt ttccataata tatggttcaa ctgtgaatgt agaagtgggg gggagggggg 120
agaaaaagaa aactctggcg tttagaggata tagaaaaata taagtacaat tgttacaaat 180
aacgcagact tcaaaaacaa aaaaatcaca acccaaacaa accaaaattt aaatgatcag 240
aattggcagc acaaagaaaa cgccctctcc tgacttgtat tgtggcagtc tgaacgcccc 300
cagaaaattg tgccaaagag tttagaaaaa taaatataca ataaaagtaa acacatacac 360
acaaaacagc aaacttcagg taactatttt ggattgcaaa caggataatt aaatgttcaa 420
acaatctgat aaaataacca tttggaaact gcttggcctt ctgttctttt atttgattga 480
ctacaatgag gtattgggtc cttgctgcac ttcaaaagca accaacaata caaaaacaaa 540
aaaaagtgtg tgtgtgtgaa tacacacaca cactaactag aagtcttgtg atgaaatgg 600

```

188

```

cacttggaag agggttttatt tttccactga agttgaaggt taataaaatg gtgtcaaacg 660
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<210> 292

<211> 2424

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (666)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1757)

<223> n equals a,t,g, or c

<400> 292

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aacaacgctt cccttctggg gtgtctgttg atctgtgttt tcatttacat ctctcttaga 240
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189

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gacgtgcagg tgaaggacag gaaggggcat gtgagcgtaa atagaggtga ccagaggaga 360
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<210> 293

<211> 2160

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (470)

<223> n equals a,t,g, or c

<400> 293

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ggaaacagca tttgccttct gagagaagag actagcaaaa agctgcagag aggattcggc 240
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 aatctggttg aacgtgctgt tcctaattctg gcactcagcc cctctgggaa acatctttta 360
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 atgacagtga ggttgaaaag tgaaaaccct aggaacttga ataggtgcct gttctttag 660
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<210> 294

<211> 1257

<212> DNA

<213> Homo sapiens

<400> 294

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 cctctcccc aggcggaccc ggaggtggca cggctgccc tcaaaccaac agacaggaaa 360
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 cagagctgga ggacagagtg gcagtgacgg cctcagaagt ccagcaggca gagagcgagg 480
 tttcagacat tgaatccagg attkcagccc tgaggccgc aggtcacgg tgaagccctc 540
 gggaaagccc cggaggaagt caaacctccc gatatttct cctcagtggt ctgggaaact 600
 tggcaagaga ccagaggacc caaatgcaga cccttcaagt gaggccaagg caatggctgt 660

191

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gccctatctt ctgagaagaa agttcagtaa ttccctgaaa agtcaaggta aagatgatga 720
ttcttttgat cggaaatcag tgtaccgagg ctgctgaca cagagaaacc ccaacgcgag 780
gaaaggaatg gccagccaca ccttcgcgaa acctgtggtg gccaccagt cctaacggga 840
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gacctttata ctgtgatctt ttaccccttt cactcttggc tttcttatgt tgctttcatg 1200
aatggaatgg aaaaaagatg actcagttaa caccaaaaaa aaaaaaaaaa gtcgagc 1257

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<210> 295

<211> 1117

<212> DNA

<213> Homo sapiens

<400> 295

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aagtcacca ctgctcagga ggtgctggcc cgggcccga acctgatttc acccaggatg 180
gagaaggcct tgagtcaatt ggccctgcgy tctgctgcgc ccagcagccc cgggtctccc 240
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<210> 296

<211> 468

<212> DNA

<213> Homo sapiens

<400> 296

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tccaattatg acaggctgac ccagctggtt tcatgtttgg ggtttatcta ctgagtaagg 360
ctgaccttac ctgagtttct gtatgtgtat ttgcaagaca gttaatacta atccatcatc 420
cctcacagag atgtagagga tgagatgtag taacttatag cagtgtca 468

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192

<210> 297
 <211> 464
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (80)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (458)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (461)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (464)
 <223> n equals a,t,g, or c

<400> 297
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 cttataaaat aaatttttggg caaacawmaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 360
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 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aggggggncc nttt 464

<210> 298
 <211> 2630
 <212> DNA
 <213> Homo sapiens

<400> 298
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193

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tgaatatgcc aaagacaata aagagcagtt catggagaat cacaatccca tcaattccgc 600
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<210> 299

<211> 1422

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (13)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (16)

<223> n equals a,t,g, or c

194

<220>
<221> misc feature
<222> (1205)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1367)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1381)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1398)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1401)
<223> n equals a,t,g, or c

<400> 299
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tatatagata cagctgtaat tatttagcct caagtgactt tctccattgc ttcacgctat 360
gccactattt tgcttcttta atttttttta ccttgcttag tattctatag tttgcccac 420
cagttttacg tccaaggaaa attagccaat gcataaaaata taaaaactat gaaaggcaag 480
gwtcaggaaa ccagagactt tgccaccaa tctcagatta ttagaaacta ggtgtcaggg 540
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gggtagattt ttgagagcat tccaaatgaa tgggtctctgg tcaaatgaat gaatggtcaa 660
atgaataaat ctgccctcac agagatacaa aaggaaaagg aatataattc ataccatttg 720
gtttaagcct taçattcatg aagaacctca agggtagatt tttgagatca ttccaaatga 780
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ttaataaaatc ttttgaaatt tgcagaatta gattgtattg tgtattttcg gttaaattgat 900
aattgaatgt aaatatttag atgcagcacc atattttata acccagcttt agcattttctt 960
catattttta ggaaaccccc cacctccttc ttttaagggc gcttcttgct ctctgaaatg 1020
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atcactctac atacagatag taaacttaat ttgtgatcct atatatgaga cagtataaaa 1140
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atatcatgaa ggtcaattat aattccatat acctttcttt gatgccacag tcagagatag 1320
atacagttgg gtggccatgg gtgtgcccac acagacaatt tttggtnaat tgtttcagac 1380
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195

<210> 300
<211> 553
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (484)
<223> n equals a,t,g, or c

<400> 300
gccacgcgt cccgatgggtt cttctattca ggcttcaatg gacaggcacc ttcgggatca 60
aagtacagag cagtcacccat ctgatcttcc tcaaaggara acagaagttg tgagttcttc 120
tgcaaagtct gggagtcttc agactgggtt gcctgaatct tttcctttaa ctggtggtac 180
tgaaaatttg aatacagaaa caactgatgg ctgtgtagca gatgcactgg gagcagcctt 240
tgccacaagg tcaaaagcac aaaggggaaa ttccgtggag gagcttgaag agatggatag 300
tcaagatgct gagatgacta acacaactga gccaatggat cactcttgat ttaattagag 360
gctaataaag gcagaatggt tattgtgaat atgtaatat tggtggctgg gccacgtaac 420
ttgattagtc attaaaaatc ttgtacgtat ataaaaagat tataatcttg tattcagtgc 480
atgntagcaa gtgtgtgatt ggccatagct ttaatatata tgctgcccag gctggctctg 540
aatttctata aat 553

<210> 301
<211> 464
<212> DNA
<213> Homo sapiens

<400> 301
ctcaaaaatc accagaaaac tcatactagt gaaaaatcct ataaatgtaa tgaatgtaga 60
aaggccttta gttactgctc tgggtcttatt caatgtcagg tcattcatac tatagaaaaa 120
ccttatgaat acggtaaatg tggcaaagcc tttaggcaga ggacagacct taaaaaacat 180
cagaaaatgc ataccgarga gaaaccctat gaatgtaatg aatgtgggaa agccttttagc 240
cagagcacat atcttacaaa acacacaaaa attcatagtg aagagaaaac aaatatacat 300
actgagtgtg gggaaaccwt twgrcaaaac tcttcttttt tacaacaata aaaacctcac 360
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aaccagaagg aggatcgtga aaacctgttg actacttaga tgat 464

<210> 302
<211> 2018
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1997)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2012)
<223> n equals a,t,g, or c

196

<400> 302

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gccacatccc ggcagccctc ctacckgcgc acgtggtgcc gccgctgctg cctcccgcctc 60
gccctgaacc cagtgcctgc agccatggct cccggccagc tcgccttatt tagtgtctct 120
gacaaaaccg gccttggtga atttgcaaga aacctgaccg ctcttggttt gaatctggctc 180
gcttccggag ggactgcaaa agctctcagg gatgctggctc tggcagtcag agatgtctct 240
gagttgacgg gatttcctga aatgttgggg ggacgtgtga aaactttgca tcctgcagtc 300
catgctggaa tcctagctcg taatattcca gaagataatg ctgacatggc cagacttgat 360
ttcaatctta taagagtgtg tgcctgcaat ctctatccct ttgtaaagac agtggcctct 420
ccaggtgtaa stgttgagga ggctgtggag caaattgaca ttggtggagt aaccttactg 480
agagctgcag ccaaaaacca cgctcgagtg acagtgggtg gtgaaccaga ggactatgtg 540
gtggtgtcca cggagatgca gagctccgag agtaaggaca cctccttgga gactagacgc 600
cagttagcct tgaaggcatt cactcatagc gcacaatatg atgaagcaat ttcagattat 660
ttcaggaaac agtacagcaa aggcgtatct cagatgcctt tgagatatgg aatgaaccca 720
catcagaccc ctgcccagct gtacacactg cagcccaagc ttcccatcac agttctaat 780
ggagccccctg gatattataaa cttgtgcgat gctttgaacg cctggcagct ggtgaaggaa 840
ctcaaggagg ctttaggtat tccagccgct gcctctttca aacatgtcag cccagcaggt 900
gctgctgttg gaattccact cagtgaagat gaggccaaag tctgcatggt ttatgatctc 960
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ccagatgaaa atgaagtctg aactctcttt ggtcttcatt taagccagaa gagaaataat 1260
ggtgtcgtcg acaagtcatt atttagcaat gttgttacca aaaataaaga ttgcccagag 1320
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gaggaagtcc ctgagttact cactgaggca gagaagaagg aatgggttga gaaactgact 1680
gaagtttcta tcagctctga tgccttcttc cctttccgag ataacgtaga cagagctaaa 1740
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attttaccac acactgtttt ttggcttgct tatgtgtagg tgaacagtca cgctgaaac 1920
tttgaggata acttttttaa aaaataaaaac agtatctctt aatcactgga aaaaaaaaaa 1980
aaaaaaaaaa aaaaccncgg gggggggccc gnacccca 2018

```

<210> 303

<211> 658

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (621)

<223> n equals a,t,g, or c

<400> 303

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gacatttagg aacaattgca cttttaaagg gagagaatgc atagttgctc acatatctca 60
gtgtcagtc cctaacaatg atcagtgtt tatttgagat taaaaaacta gaaaatgacg 120
gagtcaaggc taggaccaat attctgttca gtcttagata attatagaat acacattaaa 180

```


197

```

atcagatatt tgaatthttct taatthttgta actatthttgtc attgaaagga gatactaaaa 240
aaattatata tcgtcctaga aagtacatga actaataatg catttctaaa ggtgaaaaaa 300
gaataggtat ttttctgttt aatattcaat ttatagagag tagtacgtta atthtttttaa 360
acccagaag ctcaggatct tatcatttta aaagaaatta tcaccagttc tgtgtgagta 420
aataaagtat tataacactt tgtthtttca tccatgatac cttgtattta cttacctgag 480
ctthtttttct agggaaagaa aaatgctcag gtaataacag agccttgaaa aattkggatt 540
ttcaaaacta cctatthtatg tataggcctt tagatcatct gatgttgaat actctthtaag 600
tgatctaaag gcctacatat naaaagggtat tthttatthaa ttctggatta aacatthtc 658

```

<210> 304

<211> 671

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (524)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (593)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (657)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (659)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (671)

<223> n equals a,t,g, or c

<400> 304

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tttacttaat cttgcctagt cacaaaataa gatgtgcacc catggtttgg agagtthcta 60
tattagctga gcagtgaagat acactatthtc caaacggtgc acacctacag tagctthtga 120
aatgagccaa tcaactgttht acttaatggt tcttatcagc atgcaaataat tgcttgaaaag 180
ttatthtcctt attcaactgtt ttgttagtcc atthttgttag gaaacatttht ttcctaaaaa 240
ttgtttcaga ataattthaaa gtgaacattht ggtgtctgata ctcaaaaacc tacaatgtta 300
gccatthttaa aagtaacatg tthttctccc ctgctcattg cctgggagaa tggaaatthta 360
tataactacc tthtctthtga aaaataacgg tcgtgtcgag ttggtggtga tthttggcatt 420
ccatctthtga ctggtthtcta gtataggctt agaaataatt ggcaggtaat aatctthtcca 480
gtcaagttgc aagggtatgct tathttctctt caaaaaaaga catnctgcgg gattgagtag 540
aaaatthtagg tcagttthtgg agcttathttg aatathttctt actacattgg agntagcagt 600
ctthttcttgg atcagatcag tgcattggtta tctacagggt gaatgcttct tgggtgngna 660

```

agatctagct n

671

<210> 305

<211> 1680

<212> DNA

<213> Homo sapiens

<400> 305

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ccaaagtgct ggaattccag gcatgagcca ctgcgccag tctacacact aattcttggt 60
agcccaacag ctgttctggt ctatctaccc ctcatctcac gctcaaggag tcatacctag 120
aatagttaca cacaagaggg aaactggaag ccaaacactg tacagtattg tgtagaaagt 180
cacctcccta ctctttttat ttacatgag tgctgatgtg ttttggcaga tgagctttca 240
gctgaggcct gatggaaatt gagataacct gcaaagacat aacagtattt atgagttata 300
tcttagttct tgaaattgtg gaatgcatga ttgacaatat atttttaatt tttatTTTTT 360
caagtaatac cagtactggt taactatagc cagaactggc taaaattttt atattttcag 420
agttgaagtt ggtgaagaca ttcattgatt aaacaccaga tcctgaaagg ggttaaattct 480
actttgaaat gaatctgcaa tcagtatttc aaagcttttc tggtaatttt agtgatctta 540
tttgattaga ctttttcaga agtactaaat aaggaatttt aacaggtttt tattaatgca 600
cagataaata gaagtacagt gaggtctata gccattttat taaaatagct taaaagtttg 660
taaaaaaatg aatctttgta attacttaat atgttagtta agaaccgctc aagcttatat 720
ttgctagact tacaaattat tttaaatgca tttatctttt ttgacactat tcagtggaat 780
gtgtaagcta gctaattctt gttttctgat ttaaagcact tttaaatctt atcctgcccc 840
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aagggtact gttaattgca cataaacatg aaatgtgttt tcccctgtgt actaacacat 960
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acatttcggg ggcattaggg tagggagatg aatcaaaaaa taccctagt aatgctttat 1260
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cttcaattag cagtctagac attttataaa cagaaatctt ggaccaattg ataattttc 1440
tgactgtatt aatatttttag tgctataaaa tactatgtga atctcttaaa aatctgacat 1500
tttacagtct gtattagaca tactgttttt ataattgttt acttctgcct taagatttag 1560
gttttttaaa tgtatttttg ccctgaatta agtgtaatt tgatggaaac tctgctttta 1620
aaatcatcat ttactgggtt ctaataaatt aaaaattaaa cttgaaaaaa aaaaaacga 1680
```

<210> 306

<211> 782

<212> DNA

<213> Homo sapiens

<400> 306

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gaattcggca cgagtgaagc attagaatga ttccaacact gctcttctgc accatgagac 60
caaccaggg caagatccca tccatcaca tcagcctacc tccctcctgg ctgctggcca 120
ggatgtcgcc agcattacct tccactgect ttctccctgg gaagcagcac agctgagact 180
gggcaccagg ccacctctgt tgggaccac aggaaagagt gtggcagcaa ctgcctggct 240
gacctttcta tcttctctag gctcaggtac tgctctcca tgcccatggc tgggccgtgg 300
ggagaagaag ctctcatacg ccttccact ccctctggtt tataggactt cactccctag 360
ccaacaggag aggaggcctc ctggggtttc ccaggggcag taggtcaaac gacctcatca 420
cagtcttctt tcctcttcaa gcgtttcatg ttgaacacag ctctctccrc tcccttgtga 480
```

199

```

tttttgaggg tcaccactgc cagcctcagg caacatagag agcctcctgt tctttctatg 540
cttgggtctga ctgagcctaa agttgagaaa atgggtggcc aaggccagtg ccagtgtctt 600
ggggccccc ttggtctctcc tcaactctctg aggctccagc tggctcctggg acatgcagcc 660
aggactgtga gtctgggcas gtccaaggcc tgcaccttca agaagtggaa taaatgtggc 720
ctttgcttct gttaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 780
aa

```

<210> 307

<211> 1791

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (487)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (515)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1769)

<223> n equals a,t,g, or c

<400> 307

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ggggattgtt cctgaaacat tcacgctgtc caatctccca catttcagaa ttggtgggag 60
tgtgcatttg attgttaata accagctggg ttacaccact ccagctgaaa gaggaagggtc 120
ttctttatac tgcagtgata ttgggaagct tgtgggctgt gccatcatcc atgtcaatgg 180
agacagccca gaggaagtgg tccgtgccac acgactggct tttgaatacc aacgccagtt 240
ccgcaaggat gtgattattg atctgtttgt ctacaggcag tggggccaca atgagctgga 300
tgagccattc tacaccaacc ccacatcatgta caaaatcatc agagctcgaa agagcattcc 360
agacacatat gcagagcacc tcattgctgg cggaactcatg acgcaggagg aggtgtctga 420
aataaaatcc tctactatg ccaagttgaa tgatcactta aataacatgg cccactacag 480
gccccntgc cctgaacctg caggcccayt ggcangggcc tgggtcagcc agaagsgcaa 540
wtcaccacct ggagtacagg tgtgcccctc gacctcctgc gggttggttg catgragtyt 600
ktagaggtgc caagrgagyt gcagwtgcac agtcamctgy tgragacaca tgttcagtcc 660
agaatggaga agatgatgga cggaatcaag ctagactggg ccaccgcgga actcttgcct 720
tgggttcttt acttgctcaa ggtttttaatg ttcgtctaag tggccaagat gttggtcgtg 780
gaactttcag tcagaggcat gcaatggtgg tttgccagga gacggatgac acctacatcc 840
ccctgaacca tatggacca aatcagaagg ggtttctaga ggtcagcaac agccccctgt 900
cagaagaggc cgtcctggga ttcgaatatg ggatgagcat tgagagccca aagttactgc 960
ccctgtggga ggcacagttt ggcgatttct tcaatggtgc ccagatcatc tttgacacat 1020
tcctctctgg aggagaggcc aagtggctcc tacaaaggcg cattgtcatc ctcttccac 1080
atggctacga tggggctggg ccagaccact catcctgtcg aatagagcgt ttctgcaga 1140
tgtgtgacag tgcggaagag ggggtggacg gagacactgt gaacatgttt gtggttcacc 1200
caacaactcc tgcacagtat ttccacttgc ttaggagaca gatgggtccg aacttcagaa 1260
aaccactcat tgttgcttcc cctaagatgt tactcargct cccggcagcc gtgtcaactc 1320
ttcaagaaat ggcaccagga acaacattta acccggtcat tggtgattca tctgtggatc 1380

```

200

caaaaaaggt taagaccctc gktttctgct cccggcaaaca tttctactcc ctggtgaaca 1440
aagagaatct ctggggggcca agaagcatga ctttgccatc atccgagtag aggaactctg 1500
ccccttcccc ttggattctt tacagcaaga gatgagcarr tacaacatg ttaaagatca 1560
tattttggagt caggaggaac ctcagaacat ggggtccgtgg tcgtttgttt ctccaagggt 1620
tgaaaagcag ctggcctgca agctccgtct ggtggccggc cccctttgcc agtaccgcgt 1680
gtaggaattg gcacagttca cttgcaccag catgaagata tcctcgccaa gaccttcgyt 1740
tgatgatgat tttgaaggaa catatttcnt ttaggaatgg cattaggccc t 1791

<210> 308

<211> 723

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (705)

<223> n equals a,t,g, or c

<400> 308

gggcaagacc tcatgcctaa aaaataaaga gaaagcagag taaaactgga ctctgagata 60
ygactaaaagt tctgtgtgat acgtgtgcct tatttagctc aagacattcc tggagcacct 120
ataaaaaactg acttgtaatc caggctatgt ctcttttttag cttcgtaatc tttggcaagg 180
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gtcagttctc taatttcagg cttggtagct tgtaggaact gaaattgcaa ttaaaacctt 300
tataaactca aactaaatca tgaattacag aaaaagtcca ttcttccaaa acttgatgtt 360
accacactta caagttttaa atatgaagtc gactgtttta aggattctgc atatattcta 420
gtgtgcacat tcagaaacat ttttcttgga aaaagtaccc aacatttttt ataactgcac 480
atattaattt attgccagaa taaattgcat tgcattgctaa ataaagtcag ataattcaaa 540
tccatttgct tttatgtagt ttttcttcta aatgtcaaca ttttggaatt aaaatgttta 600
tggttttata tgagggtagg aaatcttaac tgctttgggg ggtattgttt ataggctttt 660
tgttatgggg ccggtagttt tttaataggg ggattgcccc tttcnaccgt ttggggggccc 720
ggg 723

<210> 309

<211> 533

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (393)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (396)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (463)

201

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (527)

<223> n equals a,t,g, or c

<400> 309

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aattcggcac gagcgacgtg gtgctgggcg ttgggaccct actttatcta gttcgggaag 60
ttgggtttgtg gggtcatacc tgtctgtctg ctcccagctt tcttgggttt cttccgacgg 120
cgtggggcct cgctaaggaa ttcccggccc ctccaggcca cggcttttagc ggtgtctttt 180
gcgagttctt cgtaagtaca tcttaaagct gtcaagatgg ttctagcaga ctttgggaaga 240
aaaataacat cagcattacg ctcgttgagc aatgccacca ttatcaatga agaggtatgt 300
aaaatattgt atgraatata tatgattgta ttattgtcac tagcattggg aagatggctt 360
attcataatc cccgtattta tatgtatttt gangtngact taatacttgt gggtaaaaagc 420
ccaaaggggt taacagtagg aggggtttat tggggaatta ccnccaactc aaattacttc 480
aaccttcctt aagggatttc ccaaaaaaaaa aaaaaaccgg ggggggnccc cga 533
```

<210> 310

<211> 763

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (317)

<223> n equals a,t,g, or c

<400> 310

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gtttggaata aagaaagaaa agtttactat ctgtatgtag agtgatctta atttgtgatc 60
ctatatatga gacagtataa aaatacagat aagttttaga aagactcaaa acaatatgta 120
aatgactgat gtttgcatta ttaaggaaaa cttgggatgt tgggtcaaga ggggaaagtg 180
ttagtcaatc cactttggag caatatcatg aaggtcaatt ataattccat atacctttct 240
ttgatgccac agtcrgagat asaatacart ttgggtggcc atggatgtgc cccaatacag 300
tacacatttt tkggttnaaa tttgttttca gatcatttca tggaatcttt gaagtatctt 360
tgactctaac tttgacttgg tgggtggacct tccttgggtt ttataacacc taagagatat 420
cctttagaat tacatgtatt ttagcataag gaaattgaaa aagtaaaaca tactgggttt 480
tttcaacaag accatatgta aattaaatag tgaaatgtgt atgagtttca gtagaactgt 540
accatcaaca atgtttccat aaatatgcag agttctttct tttgtattgt tatttacaat 600
attgttaaat tgaatgcatt tgcaatttct aggattctaa agaattgagt acagaaagta 660
gcaattttat tatttgatga taatatgaga attactgtgc caatactgtt ttgataaata 720
aatagatttt taaaaataaa tgtattgtac ttattagtgt agt 763
```

<210> 311

<211> 3131

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (4)

202

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (5)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (10)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (26)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (3128)

<223> n equals a,t,g, or c

<400> 311

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gggnncaaan gctggagctc caccngggtg cgtecgctct agaactagtg gatcccccg 60
gctgcaggat tcggcacgag gccacttctt gggggccgcc gcggggccgc tggctgcact 120
cagcgccgga gccgggagct agcggccgcc gccatgtccc accagaccgg catccaagca 180
agtgaagatg ttaaagagat ctttgccaga gccagaaatg gaaagtacag acttctgaaa 240
atatctattg aaaatgagca acttgtgatt ggatcatata gtcagccttc agattcctgg 300
gataaggatt atgattcctt tgttttacct ctgttggagg acaaacaacc atgctatata 360
ttattcaggt tagattctca gaatgccag ggatatgaat ggatattcat tgcattggtct 420
ccagatcatt ctcatgttcg tcaaaaaatg ttgtatgcag caacaagagc aactctgaag 480
aaggaatttg gaggtggcca cattaaagat gaagtatttg gaacagtaaa ggaagatgta 540
tcattacatg gatataaaaa atacttgctg tcacaatctt cccctgcccc actgactgca 600
gctgaggaag aactacgaca gattaaaaatc aatgagggtac agactgacgt ggggtgtggac 660
actaagcatc aaacactaca aggagtagca tttcccatct ctcgagaarc ctttcaggct 720
ttggaaaaat tgaataatag acagctcaac tatgtgcagt tggaaataga tataaaaaat 780
gaaattataa ttttggccaa cacaacaaat acagaactga aagatttgcc aaagaggatt 840
ccaaggatt cagctcggtt ccatttcttt ctgtataaac attcccatga aggagactat 900
ttagagtcca tagtttttat ttattcaatg cctggataca catgcagtat aagagagcgg 960
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gatgtaatta gaaagatcga gatagacaat ggggatgagt tgactgcaga cttcctttat 1080
gaagaagtac atccaagca gcatgcacac aagcaaagtt ttgcaaaacc aaaaggctct 1140
gcaggaaaaa gaggaattcg aagactaatt aggggcccag cggaaactga agctactact 1200
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caggagaact gaaatcattc catgttgata taaagtaggg aaaaaaattg tactttttgg 1320
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tctatttttg agttaaagct agaaaagggt tcaacataat gtttaatttt gtcacactgt 1440
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tctagaaagt ctgatgtctc aaagggtaaa cttactactt tcttgtggga cagaaagacc 1560
ttaaaatatt catattactt aatgaatatg ttaaggacca ggctagagta ttttctaagc 1620
tggaaactta gtgtgccttg gaaaaggccg caagttgctt actccgagta gctgtgctag 1680

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203

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ctctgtcaga ctgtaggac atgtctgcaa cttttagaaa tagtgcttta tattgcagca 1740
gtcttttata ttgactttt ttttaatagc attaaaattg cagatcagct cactctgaaa 1800
ctttaagggt accagatatt ttctatactg caggatttct gatgacattg aaagacttta 1860
aacagcctta gtaaattatc tttctaattg tctgtgaggc caaacattta tgttcagatt 1920
gaaattttaa ttaatatcat tcaaaaggaa acaaaaaatg ttgagtttta aaaatcagga 1980
ttgacttttt tctccaaaac catacattta tggggcaaat gtgttcttta tcacttccga 2040
gcaaatactc agattttaaaa ttacttttaa gtcctgggtac ttaacaggct aacgtagata 2100
aacaccttaa taatctcagt taatactgta tttcaaaaca catttaactg ttttctaattg 2160
ctttgcatta tcagttacaa cctagagaga ttttgagcct catatttctt tgatacttga 2220
aatagaggga gctagaacac ttaatgttta atctgtttaa cctgctgcaa gagccataac 2280
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tttatgctgc ataaatcact tatcggaat gcacatttca tagtgtgaag cactcatttc 2400
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tgtaccatct atgtgcaatt atactctaaa ttccactaca ctacattaaa gtaaatggac 2820
attccagaat atagatgtga ttatagtctt aaactaatta ttattaaacc aatgattgct 2880
gaaaatcagt gatgcatttg ttatagagta taactcatcg tttacagtat gttttagttg 2940
gcagtatcat acctagatgg tgaataacat attcccagta aatttatata gcagtgaaga 3000
attacatgcc ttctggtgga cattttataa gtgcatttta tatcacaata aaaatttttt 3060
ctctttaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 3120
aaaaaaaaaa a                                     3131

```

<210> 312

<211> 940

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (135)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (890)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (929)

<223> n equals a,t,g, or c

<400> 312

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aagcgtgact ctggagatgg agtccaagtt ggcggcagaa aagaaacaga cggaacaact 60
gtcacttgag ctggaagtag cactgactca gctacaaggt ctggaactta gttctcggtc 120
tttgcttggc atcgnacacag aagatgctat tcaaggccga aatgagagct gtgacatata 180
aaaagaacat acttcagaaa ctacagaaag aacaccaaag catgatgttc atcagatttg 240

```

204

```

tgataaagat gctcagcagg acctcaatct agacattgag aaaataactg agactgggtgc 300
agtgaacccc acaggagagt gctctgggga acagtcccca gataccaatt atgagcctcc 360
aggggaagat aaaacccagg gctcttcaga atgcatttct gaattgtcat tttctgggtcc 420
taatgctttg gtacctatgg atttcctggg gaatcaggaa aatatccaaa atcttcaact 480
gcgggtaaaa gagacatcaa atgagaatct gagattactt catgtgatag aggaccgtga 540
cagaaaagtt gaaagtttgc taaatgaaat gaaagaatta gactcaaac tccattttaca 600
ggaggtacaa ctaatgacca aaattgaagc atgcatagaa ttggaaaaaa tagttgggga 660
acttaagaaa gaaaactcag atttaagtga aaaattggaa tatttttctt gtgatcacca 720
ggagttactc cagagagtag aaacttctga aggcctcaat tctgatttag aaatgcatgc 780
agataaatca tcacgtgaag atattgggag ataatgtggc caaggatgaat gacagctggg 840
aaggagagat ttcttgatgt gggaaattga gctgagtagg gtccagatcn ggagaaagct 900
agcctttgag ccttgaagcc ctcttacng gggaggcttg 940

```

<210> 313

<211> 850

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (848)

<223> n equals a,t,g, or c

<400> 313

```

caaagttagat ttttaacggt tgtaaagggt tgaatgttta tagaagtgca tcatgaaatt 60
ttgtgtaaat ccagatgaac tgtcattata gtactataaa ttagagatag tccataaagt 120
tgggttgaag gagattgaaa atatttcctt tgattaaaag aaaataatta actaacttgg 180
gcttgcttgt gattgaagag ggagattaga tagtcctctg tccccccraa aaagaaacta 240
gcagagaaaag acmtaaaaaa gctctttgggt gtctgttcat gtgctgtaca tttttccgt 300
tttaatgtct tgtgtagata attcaaagtt tgaactattt ctttcttggga ataagtaata 360
atattattcaa tatggtgtat ctctgagttc aatttaaaac aatccaactc agtaatat 420
atttttaaat acaaataccta actaaccaat taattaataa aaaggcaaga cttacttgc 480
gtagtattgg ttctcatctg tagagaactg acattggagc aaattttaag tctcccttt 540
gaaaataagc cttgttaact gagggcgtaa tacatttccc acagatttat ccagaaacat 600
tttattagag atcttatagt agtatctcag ttcctactac agctttctaa aggatgagac 660
ttgcatttaa caaaatgaca tatataatat ttttctatag ttttgcaact gaattaaagg 720
aagggtgatgt attataatgt gtagtgaggt ataaagggct agttcattct ctcccaacaa 780
gaacttagaa taaaataaca cytttttttc atgagactta cctcattttt ggtaggctat 840
ggcagttntg 850

```

<210> 314

<211> 958

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (930)

<223> n equals a,t,g, or c

<220>

205

<221> misc feature

<222> (934)

<223> n equals a,t,g, or c

<400> 314

```

cttgcgtccc cgcgtgtgtg cgcctaattt caggtgggtcc acccgagacc ccttgagcac 60
caaccctagt cccccgcgcg gcccttattt cgctccgaca agatgaaaga aacaatcatg 120
aaccaggaaa aactcgccaa actgcaggca caagtgcgca ttggtgggaa aggaactgct 180
cgcagaaaga agaaggtggt tcatagaaca gccacagcag atgacaaaaa acttcagttc 240
tccttaaaga agttaggggt aaacaatatc tctggtattg aagaggtgaa tatgtttaca 300
aaccaaggaa cagtgatcca ctttaacaac cctaaagttc aggcattctt ggcagcgaac 360
actttcacca ttacaggcca tgctgagaca aagcagctga cagaaatgct acccagcatc 420
ttaaaccagc ttggtgcgga tagtctgact agtttaagga gactggccga agctctgccc 480
aaacaatctg tggatggaaa agcaccactt gctactggag aggatgatga tgatgaagtt 540
ccagatcttg tggagaattt tgatgaggct tccaagaatg aggcaactg aattgagtca 600
acttctgaag ataaaacctg aagaagttac tgggagctgc tattttatat tatgactgct 660
ttttaagaaa tttttgttta tggatctgat aaaatctaga tctctaatat ttttaagccc 720
aagccccttg gacactgcag ctcttttcag tttttgctta tacacaattc attctttgca 780
gctaattaag ccgaagaagc ctgggaatca agtttgaaac aaagattaat aaagttcttt 840
gcctagtaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 900
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa gggnggccgt tttaaaggaa ccagggttt 958

```

<210> 315

<211> 500

<212> DNA

<213> Homo sapiens

<400> 315

```

cgattgaaca ggagaagcaa gcaggcgaat cgtaatgagg cgtgcgccgc caatatgcac 60
tgtacattcc acaagcattg ccttcttatt ttacttcttt tagctgttta actttgtaag 120
atgcaaagag gttggatcaa gtttaaatga ctgtgctgcc cttttcacat caaagaacta 180
ctgacaacga aggcgcgcgc tgcccttccc atctgtctat ctatctggct ggcagggaag 240
gaaagaactt gcatgttggt gaaggaagaa gtgggtgga agaagtgggg tgggacgaca 300
gtgaaatcta gagtaaaacc aagctggccc aaggtgtcct gcaggctgta atgcagttta 360
atcagagtgc catttttttt tttgttcaaa tgattttaat tattggaatg cacaattttt 420
ttaatatgca aataaaaagt ttaaaaactt aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 480
gcggccgctc gaattaagcc 500

```

<210> 316

<211> 1228

<212> DNA

<213> Homo sapiens

<400> 316

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ggcacgagct cgtgccgctt gcaactccac ctcagcagtg gtctctcagt cctctcaaag 60
caaggaaaga gtactgtgtg ctgagagacc atggcaaaga atcctccaga gaattgtgaa 120
gactgtcaca ttctaaatgc agaagctttt aaatccaaga aaatatgtaa atcacttaag 180
atttgtggac tgggtgtttg tatcctggcc ctaactctaa ttgtcctgtt ttgggggagc 240
aagcacttct ggccggagggt acccaaaaaa gcctatgaca tggagcacac tttctacagc 300
aatggagaga agaagaagat ttacatggaa attgatcctg tgaccagaac tgaaatatc 360
agaagcggaa atggcactga tgaaacattg gaagtgcacg actttaaaaa cggatacact 420

```

206

```

ggcatctact tcgtgggtct tcaaaaatgt tttatcaaaa ctcagattaa agtgattcct 480
gaatthttctg aaccagaaga ggaaatagat gagaatgaag aaattaccac aactthttctt 540
gaacagtcag tgatttggtt cccagcagaa aagcctattg aaaaccgaga ttttcttaaa 600
aattccaaaa ttctggagat ttgtgataac gtgaccatgt attggatcaa tcccactcta 660
atatcagttt ctgagttaca agactttgag gaggaggag aagatcttca ctttcctgcc 720
aacgaaaaaa aagggattga acaaaatgaa cagtgggtgg tccctcaagt gaaagtagag 780
aagacccgtc acgccagaca agcaagtgaag gaagaacttc caataaatga ctatactgaa 840
aatggaatag aatttgatcc catgctggat gagagagggt attgttgat ttactgccgt 900
cgaggcaacc gctattgccg ccgcgtctgt gaacctttac taggctacta cccatatcca 960
tactgtacc aaggaggacg agtcatctgt cgtgtcatca tgccttgtaa ctgggtgggtg 1020
gcccgcagtc tggggagggt ctaataggag gtttgagctc aaatgcttaa actgctggca 1080
acataataa aatgcagct attcaatgaa tttctgccta tgaggcatct ggcccctggt 1140
agccagctct ccagaattac ttgtaggtaa ttcctctctt catgttctaa taaacttcta 1200
cattatcacc aaaaaaaaaa aaaaaaaaaa 1228

```

<210> 317

<211> 1731

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1661)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1726)

<223> n equals a,t,g, or c

<400> 317

```

gcaatctttt tctctcctgg ttaaatgggg ctgttgatca ttttctctac gtaagggaa 60
ttattgatta agtttaatta atttgatata gactgtcatg tagtgatgta gtgctatact 120
gtagtcggaa gtttttctta aaagcaaaga gcaaaaatgc aaagttttat ttgtaaaagc 180
tgaggaccct tggggatgga ttaggtttgc cgatgatcct aaaagtaagc aaactgtatg 240
acaagactac tattgcaaat gaaggatatt tatagctaaa ctgcgcacac aaaagaagtt 300
ttatattgtg agttatagtt gggttcagaaa acagtttgta ctctccctgg cccaggaagg 360
cacacagaca aaaatgtcgg ccacttttac tcaaatacag cccaagcaca gacagtcagg 420
ttcgtgatca tcaccaacat ctgataaaat ctcatgaag gcaatgccat cacagctttg 480
ctcaattact acgaggaaga gacaacaagc atctttcgtg ttgtctcgtc tgattggagg 540
ctgaatagta gatggaatgg ggggacagtg tgcctgggtg gaggaagacg taagatcccc 600
matthggaaa gcatgcccc ctccttttta gtagaagccc atggttgccc tttgccaac 660
tggggaggag gcaatgagcc ttggtggaag gaacctctct gtkgatattt aaagaagtga 720
gggctgtggg tattcattgt tagaaatgcc aatttcaact tgaaaccata gtccaagtct 780
ctaggttggt agaagggaaa ggaaggaagt ggtcccagtg attctagatc tggttgggaa 840
acttctgcct catgactctg tcctttgagc ctttgagacag cagcacaaaa cataacaatt 900
tttattttta aacagaccca ttctttttga tcccacagga gctgtgggtg ggtcggccgt 960
agccccggga tgtggtttta gtggattact gcctagctga gccaaaatgt ttgcttgtag 1020
ctgttgagcc actacagcaa accgctgctt acagtgcatt gtgtatttct gtagtactgt 1080
tttgcattht ccatagagac agaaaacttt gcaagtcaat cactgttggt cccatggtac 1140
tgtaagaaaa aaaaaaagga aaaagaaaaa aaaaaagaaa accagccaat cattgcgtgt 1200

```

207

```

acagagctaa aaattgtaat taatagagcc tgttgggaaa aaaaagaaaa caactgttgc 1260
ctttttttct tgtataaaaag agaatttatg acaaaattta gctgtgagga atgtgatacg 1320
tgtttatatt tctgaatatg gracaaattg attcatgggg atatatttta atgtaaacta 1380
aatcaggatg gtaaagtgtg tttaaaatgg grgactatat aagtaattct cttaaagcttt 1440
agttggtttg aatatcatca tttcctccat ggtgagcctg cttgtgratt attaagcact 1500
tgtttgcatc ctctgttctt cactcattta tttcttgcat tgtgctatgg acttaatgct 1560
ctttctgtat tgatgaaaag cagtatgtgg gccaatcttt ttataaaaca ctatgcatat 1620
ataaatatta cattgttcat agctttatct gacttatggg nttatacata acattagaat 1680
gagtaagctg tagttgtgtg gacattttat aaaaacaaag gtcccnttcc c 1731

```

<210> 318

<211> 1208

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (29)

<223> n equals a,t,g, or c

<400> 318

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cgggtcgacc cacgcgtccg gaaagatcnt ctttaggaat aatagatgat ggtaagttcc 60
acttttggtta ttggaaggca agtcattatt actggtatta gttaaaacac atatcaaattg 120
cttgctcttc atcatatata tagttatgca tacatacaca cacacacata cagtatatcc 180
tttcctcaaa aggggttaaga tgtctaaaat agggacctag aagcttaaca ctattttaagt 240
aaatacagta gaagctcaca aatagatttc tttgcacaat gattttttgc aaaattttac 300
agtaataata atcccaaggc aaatctctcc tgaactgctt tccattccat aatttgtagt 360
ataattcttg gattccactg ttttctttgg ggaatggaag ttctgaatta aaagcccact 420
gtggagatgc tgtggttcat ggaatctctt ccagtgtaat tcagaatcat tggcctagaa 480
agtctctgat atttggaggg gaacaaaaat cactcacaag caatccatga tctatacaca 540
taagcataat ttccttttagt tctagttagt catcagagaa cagtcatgta tgcaagtttt 600
gtgactgaga aattttctgtg cttccaatcc acaatgagat gcatgatttt gttttcatcc 660
catttcccc cagccccctgt aaatcagggg aaatgcgcaa ctgatcgccct aggagagggc 720
ctcgtagtgg cacagctgga gatagtttca aagtctaaac caccagccca tcctgaggaa 780
agcctcctat ggaatgtaaa gtgcaatcat ttcttcagat ataagacttt cccaacaat 840
gtgattggat tccttttatgg caaaatcgag agaagctgcc atccacctgc ttatgcattt 900
atctcttttg tggacttgct tgaccacctt ctatttgccc agagtttgct caattccaag 960
acagtgccca tgaatgggac acctgtaatg taaccacac agcggtttgc agagaatggt 1020
agccatgact tgggctttct gaaagtgtgc tataatttct ctatccctac ccacaaccct 1080
gggaagtgtg agcaagaggg gcatactatt gggctgggag gatttgacag catttcccc 1140
gttgcccttt aagttcttct atttcaaacg ttaattttgc ttctctttct aaaaaaaaaa 1200
aaaaaaaaa 1208

```

<210> 319

<211> 756

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (30)

<223> n equals a,t,g, or c

<400> 319

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ccccagtctt accactctag catgcttgn ataataaaca tggtagtgga cttttttcta 60
aagatcccc ctctctcaga ggtcatgtcc tttcgtaacc agcccttgct cttgaacccc 120
cakgcagttt ggtgggttatg ccaaggaagc agactacgta gcacaagcca cccgtctgcg 180
tgctgccctg gagggcacag ccacctaccg gggggacatc tacttctgca cgggttatga 240
ccctcccatg aagccctacg gacggcgcaa tgagatctgg ctgttgaaga catgagtga 300
ccactgaacc aagaacttac tggaagtgtg cctctgtgtc tccttcctcg ggggtaagga 360
ggggacagtg cttcccaagt tccagctgca agtccaactt aaccaacttt cttcaaagt 420
cagttactgc caattttctg aaaaaagcat gttccatata ctaagtctct tttctcacgg 480
taggaaataa tacagccaag atatgcagca tccttctcat tgatgtagaa aattctgcga 540
tagaccagaa aaatcctggc agcttttctc caggcatctg ggtcactaaa aactgatttt 600
ctaaaattat tggatttgta ttttgttatt aagggggaaa atgtgatttg tgcctgatct 660
ttcatctgtg attcttataa gagctttgtc ttcagaaaaa ctaaaaataa aaggcattga 720
cttaaacagc tgaramaaaa aaaaaaaaaa aaaaaa 756

```

<210> 320

<211> 1209

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1203)

<223> n equals a,t,g, or c

<400> 320

```

cttcgccgtc atccgcttcg aaagcatcat ccacgagttc gaccggtggt ttaactatag 60
atcaacacat catcttgcac ctcatgggtt ctatgaattt ttaaattggt ttgatgaaag 120
agcatggtat ccactaggaa gaatagtagg tggtagtggt taccagggt tgatgataac 180
cgctggcctt attcattgga ttttaaatac attgaacata actgttcaca taagagacgt 240
atgtgtgttc cttgcaccaa ctttttagcg cttacatct atactactt tcctgcttac 300
aagagaactt tggaaccaag gagcaggact tttagctgct tgttttattg ctattgtacc 360
aggctacata tctcggtcag tagctggatc ctttgataat gaaggcattg ctatttttgc 420
acttcagttc acatactatt tatgggtaaa atctgtaaaa actgggtcag ttttttggac 480
aatgtgctgc tgcttatact atttctatat ggtctctgct tggggtggtt atgtatttat 540
catcaatctt attccactgc atgtatttgt gttgttactg atgcagagat acagcaaaag 600
agtctacata gcataatgca ctttctacat tgtgggttta atattatcaa tgcagatacc 660
ttttgtggga ttccagccaa tcagaacaag tgaacacatg gcagctgcag gtgtccttgc 720
attgctgcaa gcttatgctt tcttgagta tctgagagac cgattaacaa aacaagagtt 780
ccagaccctt ttcttttttg gtgtatcact agctgcaggt gctgtgttcc ttagtgtcat 840
ctatttgact tatacagggt acattgcacc atggagtggc aggttttatt cattgtggga 900
tactgggtat gcaaaaatac acattccaat tattgcatca gtgtctgagc atcaacctac 960
gacttgggtg tctttcttct ttgatctaca tattcttgta tgtaccttcc cagcaggcct 1020
ttggttctgc atcaaaaata tcaacgatga aagartattt ggtaagagag gtttttaatg 1080
actactttga tatggaatag ttatttttct ttttgagatt atttacttta aatttttgtt 1140
tttctatgtt tgactctata tattcaagat aaattttctc ctttattttg cataggtgct 1200
tanccaaga 1209

```

<210> 321

209

<211> 668

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (653)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (654)

<223> n equals a,t,g, or c

<400> 321

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aaagcagatg ccatctatga tatgattggg tccccagact ttatcctgga gcccaaagag 60
ctggatgatg tttatgacgg gtacgtaaat ttctgaagrt tctttcttcc aaaacatggt 120
gaatttgtag aacttctctg ccaagggttat ggctgaccag ctccgcaagc ctcccagccg 180
agaccagtgg agcatgaccc cccagacagt gaatgcctac taccttccaa ctaagaatga 240
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gaagctgcct acaatgctta caaagcatgg ctgagaaaagc atggggagga gcagcaaytg 600
cagccgtggg ggttamcaac caccastytt cttcgtggga tttgccccag gtnntggtgc 660
tcggtccg

```

<210> 322

<211> 809

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (372)

<223> n equals a,t,g, or c

<400> 322

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ttacatattt aacaaacctt gaagctaaat cagtttgtct tttatcaaaa ctgcaactcc 180
tctaagttga aagcacagtg acaagagaaa gcattacaaa ttcttgagaa ataatagaaa 240
ttaaagctct tttcaaacct gtgaacaagt atagtaccag aagtataaga ttcagatagg 300
cccaagttgt agttcttggt atgagtcctt caaccctatg gactttggac aaattacttc 360
tctgcgtctg tntcctcctc tgtaaaatga aaataatttc tgtttcctac aggtatagtc 420
taaataggga taattacacc tacttcaaag ttgtaaaata cacaattaca actagatagg 480
aggtataagt tctagtgttc tgtagcactg taggatgact atagttaaca atattgtata 540
gtttcacaata gctagaagaa ggatattgca tgttcccaaa acaaagacat aagtttttga 600
gatgatagat atgctaatta ccctaatac tatatgttat atgtattgca acatcactat 660
gtaccccat aaatatgtac agttattgtg tattaaaatt tttttaaact aaaattataa 720

```

210

gacattaaaa aaaggtatca catgtaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 780
aaaaaaaaaa aaaaaaaaaa tcgaggggg 809

<210> 323
<211> 1442
<212> DNA
<213> Homo sapiens

<400> 323
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caggcgcaat gtggtggctg cttctctggg gagtcctcca ggcttgcca acccggggt 180
ccgtcctctt ggcccaagag ctaccccagc agctgacatc ccccggttac ccagagccgt 240
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aa 1442

<210> 324
<211> 2701
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (9)
<223> n equals a,t,g, or c

<220>

211

<221> misc feature

<222> (17)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2699)

<223> n equals a,t,g, or c

<400> 324

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agaaccaatg gatacttcca gtgtaactca cacagaacac tacaagacac tgatagaggc 180
aggcctccca cagaagggtg cagaaaagact tgatgaaata tttcagacag gattggtagc 240
ttatgtcgat cttgatgaaa gagcaattga tgctctcagg gaatttaatg aagaaggagc 300
tctgtctgta ctacagcagt tcaaggaaaag tgacttatca catgttcaga acaaaagtgc 360
atTTTTtatgt ggagttatga agacctacag gcagagagag aaacagggga gcaagggtgca 420
agagtccaca aaggggacctg atgaagcgaa gatcaaggcc ttgcttgaga gaactgggta 480
tactctggat gtaaccacag gacagaggaa gtatggtggt cctccaccag acagtgtgta 540
ctctggcgtg caacctggaa ttggaacgga ggtatttgta ggcaaaatac caagggattt 600
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ggaagctgca caggaagccg tgaaactgtg tgacagctat gaaattcgcc ctggtaaaca 780
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gtatggagta tgctgtaaat aaaaatacaa gctagtgcct tgtcttagta gttttaagaa 2400
attaaagcaa acaaatttaa gttttcttgt attgaaaata acctatgatt gtatgttttg 2460

```

212

```

cattcctaga agtaggttaa ctgtgttttt aaattgttat aacttcacac ctttttgaaa 2520
tctgccctac aaaatttgtt tggcttaaac gtcaaaagcc gtgacaattt gttctttgat 2580
gtgattgtat ttccaatttc ttgttcattg aagatttcaa taaaactaaa aaatctattc 2640
aaaaaaaaaa aaaaaaaatg accctcgaga aaaaaaanaa aaaaaaanaa aaaaaaanaa 2700
a                                                                 2701

```

<210> 325

<211> 1070

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (9)

<223> n equals a,t,g, or c

<400> 325

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agttggcctt cgaggcacca tcataggaat aaaaggagct aatagagaag cccgatgtact 180
atttgaagta ttatttgatk wagaatttcc tggagggtta acaataagat gctcacctgg 240
tagaggttat cgactgccaa caagtgcctt ggtgaacctt tctcatggga gtcgctctga 300
aactggaaat cagaagttga cagccatcgt aaaaccacaa ccagctgtac atcaacatag 360
ytcaagttca tcagtttcct ctgggcattt gggarccctc aaccattccc ctcaatcact 420
ttttgttcct actcaagtac ctactaaaga tgatgatgaa ttctgcaaca tttggcagtc 480
cttacaggga tctggaaaga tgcaatactt cgagccaact atacaagaga aggggtgcagt 540
tctacctcaa gaaataagcc aagtaaatca acatcataaa tctggcttta atgacaacag 600
tgttaaatat cagcaaagaa aacatgaccc tcacagaaaa tttaaagaag agtgtaagag 660
tcctaaagct gagtggttgt cccaaaaaat gtccaataag cagcctaact ctggaattga 720
gaacttttta gcatctttga atatctccaa agaaaatgaa rtacagtcac ctcacatgg 780
ggagcctcca agtgaagagc atttgtcacc acagtcattt gccatgaagg gaacacggat 840
gcttaaagaa attctaaaaa ttgatggctc taacactgtg gaccataaga atgaaatcaa 900
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tcagcctaaa caaaataaga aattagcacc ttatatgaac aagcctcaca gtgctaata 1020
gtaccataat gttcagtcta tggacaatat gtgttggcct gccccagcc 1070

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<210> 326

<211> 1729

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (125)

<223> n equals a,t,g, or c

<400> 326

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cgttttcttt ttggctgccg gagggccccg catccaccgc tgagctggga gaaagatggc 120
ggcancgtgc gacaggattt ggcccagctc atgaattcga gcggtctctc taaagatctg 180
gctggcaagt atcgtcagat cctggaaaaa gccattcagt tatctggagc agaacaacta 240

```


213

```

gaagctttga aagcttttgt ggaagcaatg gtaaattgaga atgtcagtct cgtgatctcg 300
cggcagttgc tgactgattt ttgcacacat ctctctaact tgcctgatag cacagccaaa 360
gaaatctatc acttcacctt ggaaaagatc cagcctagag tcatttcatt tgaggagcag 420
gttgcttcca taagacagca tcttgcatct atatattgaga aagaagaaga ttggagaaat 480
gcagcccaag tgttggtggg aattcctttg gaaacaggac aaaaacagta caatgtagat 540
tataaactgg agacttactt gaagattgct aggctatatc tggaggatga tgatccagtc 600
caggcagagg cttacataaa tcgagcatcg ttgcttcaga atgaatcaac caatgaacaa 660
ttacagatac attataaggt atgctatgca cgtgttcttg attatagaag aaaattcatt 720
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ctttttcttt aaacagaggt gaaatatctg tggctaaaaa gtttgagatt tgtgataact 1620
ttgtagtcat gtaaaactta agtgcttcat gcctctccaa atgtggttat tctaataaat 1680
ggagaaatga gccaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1729

```

<210> 327

<211> 686

<212> DNA

<213> Homo sapiens

<400> 327

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ggcacgagca tgagccactg caccagccg atactactat atccccattt tacagatgag 60
cacatgggca aattgagggg aaggcactga cccatgatca tacagctgag aagtggcaaa 120
ggcaggattt gaacctagaa cctctggctc cacacactag taatctaaac cactctccct 180
acaatacaac atacgtggta aagatgtgtg gtgggcacgc aatcaacgta ggtcccttca 240
cagttgctgg gagaggcagg aatttgcagt tctctcgcgt tctctcctc cgtgcccac 300
ctgtcctggg tcattcctgc agcctgcctt gcctgcctg gtctcacctt ccctctgcca 360
acagaagtct gggcaggggt ttatgggctc tgataaggcc ctggcagggc cgaagttcat 420
gagcacttcc tctttgcagg agggcgtagg ggaggggacc caggtgattt gggctcctggc 480
tggtcaccag ggaagctggc aagggaaggg agactagggg gcgctctagg agaagccgac 540
agcctgagag tcccagaaga ggagccctgt ggaccctccc ctgccagcca ctcccttacc 600
ctgggtataa gagccaccac cgcctgccat ccgccaccat ctcccactcc tgcagctctt 660
ctcacaggac cagccactag cgcagc 686

```

<210> 328

<211> 1241

<212> DNA

<213> Homo sapiens

<400> 328

214

```

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ctgcagctcg cttcaagatg gccgcttget cgcattcatt ttctgctgaa cgacttttaa 120
ctttcattgt cttttccgcc cgcttcgate gcctcgsgcc ggctgctctt tccgggattt 180
tttatcaagc agaaatgcat cgaacaacga gaatcaagat cactgagcta aatccccacc 240
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attccttctg taaaacgtgt attgttcgtt acctggagac cagcaagtat tgctctattt 360
gtgatgtcca agttcacaag accagaccac tactgaatat aaggtcagat aaaactctcc 420
aagatattgt atacaaatta gttccagggc ttttcaaaaa tgaaatgaag agaagaagg 480
atTTTTatgc agctcctctt tctgctgatg ctgccaatgg ctctaataga gatagaggag 540
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aattctttga ccagaacaga ttggatcgga aagtaaacia agacaaagag aaatctaagg 660
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aaaaaaaaa accccggccg ctccacttc agattggtaa c 1241

```

<210> 329

<211> 1652

<212> DNA

<213> Homo sapiens

<400> 329

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aatgaatcca gctactacat taccaggtct gatgccttta ccagcaggac tgcccaacct 180
ccccacctc aacctcaacc tcccagcacc acacatcatg ccagggggtg gcttaccaga 240
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tgcacctctc cccctgccat ccgagttcct cccgtcattc cccctgggtc cagagagctc 360
ttctgcagca agctcaggag agctgctgtc ttccctcccg cccaccagca acgcacctc 420
tgacctgtcc acaactactg caaaggcaga cgtgcctcc tcaactactg tggatgtgac 480
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ctatcattaa tttcatacta gtttgtagcg tatctgtagg catcctgtaa ataattcaa 720
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aatcactcag acaacatttt gtaactgtg ctggtgtctt ctacatacac cttataaagt 1260
gacatttcaa aagaaataag gtgccacagt tttaaaccag aagggtggcac tctgtggctc 1320
cttgtagtat tatagctata ctgggaaagc atagatacag caataaagta cagtaatttt 1380

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215

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actttttttt ttgtgttaca tctaaattac aacccttaat tgccacgtgt gcacttacta 1440
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tgtttgcttt ctcccatttt taagagatgg taagttaact ggaattgatt tactgaatga 1560
aattaaatgc agatatccct gtttttgaaa taaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1620
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aa 1652

```

<210> 330

<211> 1916

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1895)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1902)

<223> n equals a,t,g, or c

<400> 330

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agctgaaaat atatgagcag gtgacattga ggtttactga aatagccaat ttgactgggtg 120
cttagactat tgtgcagtaa acctaaaagg tagtggagaa ttgcttcctg cttagcaggaa 180
gccttcacatc tcttgagtac ccaaaccagg cttcaggtgt cctttgagga tagccagggtt 240
tgaaatTTTT agtttctcag gaagagctct tctatgtggc aggggctgat agggcaaaat 300
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ggtataatgc ccttccatca cacaacagga caccacccca gttttgtttt ctgggtttct 420
tccccctttg taggaatcag ataccttttg tagaaaaaaa tggcttatgc cacgtaaagg 480
tgaatTTTTa gaaaccacct tctaggcggt tttggaacct ttactgaaat cctccccctt 540
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ctgctttctc tttctgtctg gatagtcagg aaaagattta atgtttaata tttaaacaaa 660
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216

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<210> 331

<211> 1658

<212> DNA

<213> Homo sapiens

<400> 331

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 ccccgcgcg cgcccgccagg gccatgctag ccttgccggt ggcgcgcggc tcgtgggggg 180
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 cctgctgctg cccgtgccc gctgcttggg ctgctggcc gaacgctgga ggctgcgtcc 300
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 tggggcccg cgagcaccac cagcctgtat gaaaacccat ggacaatccc gaatatgttg 480
 tcaatgacga gaattggctt ggcccagtt ctgggctatt tgattattga agaagatttt 540
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 aatgaatcca ggttccaata tcaacaaca ttgctatg 1658

<210> 332

<211> 1102

<212> DNA

<213> Homo sapiens

<400> 332

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 agtccattgg caagtttggc ctggccttag ctgttgacagg aggcgtgggtg aactctgcct 180
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217

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atgtcaacat cacactgcgc atcctcttcc ggctgtgcg cagccagctt cctcgcctct 420
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tcaagtcaagt ggtggctcgc tttgatgctg gagaactaat caccagaga gagctggtct 540
ccaggcaggt gagcgacgac cttacagagc gagccgccac ctttgggctc atcctggatg 600
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<210> 333

<211> 4201

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (4077)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (4161)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (4186)

<223> n equals a,t,g, or c

<400> 333

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cctcccgcgt ctgctgccgc tgccgccctg agtcactgcc tgcgcagctc cgccgcgctg 120
gtccccata ctagtcccg atatttggag ttcttacaac atggcagaca ttgacaacaa 180
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gattcttgca gcccttcaag aaagacttga tggctctgta gaaacaccaa caggatacat 360
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acacgatgaa cctattctga agcacttgaa agatattaaa gtgaagttct cagatgctgg 780
ccagcctatg agttttgtct tagaatttca ctttgaaccc aatgaatatt ttacaaatga 840
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aggcccttaa aataactgaa ttaattgttt attgtaattg taggccattc ccattattaa 3960
aaataaagac aaaacttgaa gtaactgaaa atcttatcgt gctatgtaga aatattgaac 4020

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219

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taatattcaa atatttgaat gcttttggtt cagggattgg tttaaaattg gagtcnnttt 4080
tttatggggt tagtcttaca aaaatttaag cctttatatt ttgacttta aatcaaaacc 4140
aaatgttatt ttaaattgtac nggaatwgga ttgggttaggt gcmggnagga rtgtwagggt 4200
c 4201

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<210> 334
<211> 1239
<212> DNA
<213> Homo sapiens

```

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<400> 334
aattcggcac gagctgaagc cctctctctg gatgacacag actttgaggt gtagtgaaat 60
ctttgctgtt caccagatgt aatgttttag ttccttaca acagggttgg gggggggaag 120
ggcgtgcaaa aactaacatt gaaattttga aacagcagca gagtgagtgg attttatttt 180
tcgttattgt tgggtggttta aaaaattccc cccatgtaat tattgtgaac accttgcttt 240
gtggtcactg taacattttg ggggtgggac agggaggaaa agtaacaata gtccacatgt 300
ccctggcatc tgttcagagc agtgtgcaga atgtaatgct cttttgtaag aaacgtttta 360
tgatttttaa aataaattta gtgaacctat ttttggtggt catttttttt ttaagacagt 420
cattttaaaa tgggtggctga atttcccaac ccaccccaaa actaaacact aagtttaatt 480
ttcagtcctt ctgttggaca tataagtgc tctcttggtg gacataggca aaataacttg 540
gcaaaacttag ttctggtgat ttcttgatgg tttggaagtc tattgctggg aagaaattcc 600
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gccctacttt ttcaacaatt ttctatgta gtgtgaaga actaagggtg ggagcagtac 720
tacaagttga gtaatggtat gagtatatac cagaattctg attggcagca agttttatta 780
atcagaataa cacttggtta tggaagtgc taatgctgaa aaaattgatt atttttatta 840
gataatttct cacctataga cttaaactgt caatttgctc tagtgtctta ttagttaaac 900
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<210> 335
<211> 1249
<212> DNA
<213> Homo sapiens

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<220>
<221> misc feature
<222> (36)
<223> n equals a,t,g, or c

```

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<400> 335
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caaaattgtt aagaaatggt agtgggtggg ctgatctgac tgcagccatc ggtaaataaa 120
agtttttgat cctgttgaac ccgcctgaga cgggtgctgt aggggaaagc cttccgcacc 180
cacacaggaa ttctgctgag gtccccctc cttccggcca atggcagaag tgggggaaaa 240
tttttagaag aaaagcaaac atgtgagacc aatcattatc aaatactttt attttttggt 300
tgagtattta tctttttatt ttttattttt ttttttgaag gaatgtcttg gaatgcgcaa 360
gtctcccttt agagccgtct tttgcaggga gcgggaagtg acaagagctc agatctccct 420

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220

```

cccgatctcc ctccccacct ccgaagtctc ctccgtggac cacaggtgga tctttgtgcg 480
aacaacttgc atttcggaag ccactgtccg tctttaaaca gaaagtcgaa ggagccacga 540
agcaagcggc egtcggggcg tccgyctgcc gtcccttcc atgttcctcc tcttccttcg 600
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<210> 336

<211> 722

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (690)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (703)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (718)

<223> n equals a,t,g, or c

<400> 336

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cagactcaat ttaaattctta cctttgattg ttgaaaaaag tcactaagat gtgaatacag 540
aatagacatt gagaggttat atatgtccaa aactcatctg tccagcagtc accgtcctct 600
tcagagtggg cacgttgggc agrtgggcac aggtgctggg gatgcccctc ckgggcaaaa 660
cgccccattt gtggcacttc cagatactan ttatttactt ttnaagagag agacaggntc 720
ac 722

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<210> 337

221

<211> 2210

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (40)

<223> n equals a,t,g, or c

<400> 337

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accggagcgg cggcgcgctct ggaggaggct gcacgagcgg aagaccccag tccagatcca 120
ggactgagat cccagaacca tgaacctggc catcagcatc gctctcctgc taacagtctt 180
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<210> 338

<211> 741

<212> DNA

222

<213> Homo sapiens

<220>

<221> misc feature

<222> (581)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (656)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (711)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (719)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (720)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (737)

<223> n equals a,t,g, or c

<400> 338

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ctctagatgt tcccccttgc ctagecctctg tgaaggcaga aatcactaat ggagtgggtt 180
gccttaaata cctttgtacg tgtaacatcc tgcaatgtat atgatattta gtaggcattc 240
aataagtatt tgctgaataa gttaaaaaaa ttaatatgta tctgatgctg attaatcact 300
ctatataaaa tataaaatgt gtaaaaaaaa aatgggtcact ggttttactg ttgaagcctg 360
tggttttatag atggaaaata tcacaagcaa attaaaatag aagagaatgc aacagggttc 420
agttatgagt cactttttcg cgaatacctt aatgagacag ttacagaagt ttggatagaa 480
gatccttata ttagacatac tcatcagggc attgatcaag tgcagcaaag tagaggcctg 540
caagaaatag aagagtcact caggagtcac gggagtgtg ntggaaggtc aatactcttc 600
ttcaatacat gaccgagaaa ttaggttcaa caatggatgg gtgattaaag attggnaagg 660
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tagcactggt ttttggnatc a                                     741

```

<210> 339

<211> 2045

<212> DNA

<213> Homo sapiens

<400> 339

```

cccgggtcga cccacgcgtc cggaaagatc caaaacaagt ggctgcggcc gtcgcccagg 60
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atggcgctat ccgggtcgac cccggccccg tgctgggagg aggatgagt cctggactac 180
tacgggatgc tgctcgttca ccgtatgttc gaggtggtgg gcgggcaact gaccgagtgc 240
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cacctggcgc gcaagcggcg ccggccagtg tctccagaac gctatagcta tggcacctcc 480
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tgcaaaggct ttgggggtga tggaaaagac ctttaacaaa tgataccaat taaactgccc 1920
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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 2040
aaaaa
2045

```

<210> 340

<211> 2074

<212> DNA

<213> Homo sapiens

<400> 340

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cctatgga aaacgccagca acggggcctt tttaagggtt ctggcctttt gctggccttt 60
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tgagtgaagt gataccgctc gccgcagccg aacgaccgag cgcagcgagt cagtgaagca 180
ggaagcggaa gagcgcccaa tacgcaaacc gcctctcccc gcgcgttggc cgattcatta 240
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tgtgagttag ctactcatt aggcacccca ggctttacac tttatgcttc cggctcgat 360
gttgtgtgga attgtgagcg gataacaatt tcacacagga aacagctatg accatgatta 420

```

224

```

cgccaagctc gaaattaacc ctactaaag ggaacaaaag ctggagctcc accgcggtgg 480
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gcagacgacc aaggggctgc ggcttctctt tgatggcgat gccacctcc tcatgtccat 600
ccccagcccc ttcctgggac ggctctgtgg cctctgtggg aacttcaatg gcaactggag 660
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atggcgggtg cccggctcct ccaagggtcg tggcgagggc tgcgggcccc aaggctgccc 780
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ctctaccct gctctaccgc ttttctgggt cacagaggcc aaatgtgaga gcattgaata 2040
aatacttaa gtaaaaaaa aaaaaaaaaa aaaa 2074

```

<210> 341

<211> 2867

<212> DNA

<213> Homo sapiens

<400> 341

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gttcactctt attcttcacc ttctagaagg ggcctgagt aattcactca ttcagctgaa 120
caacaatggc tatgaaggca ttgtcgttgc aatcgacccc aatgtgccag aagatgaaac 180
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gtctactcct ccaggtaatg atgaacccta cactgagcag atgggcaact gtggagagaa 420
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aagatgcaca ttcaataaag ttacaggact ctatgaaaaa ggatgtgagt ttgttctcca 720
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gacaacacag ccaccaaatc ccaccttctc attgctgcag attggacaaa gaattgtgtg 960

```

225

```

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```

<210> 342

<211> 2131

<212> DNA

<213> Homo sapiens

<400> 342

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tgcaaaataa aatattacaa ttattgcctt attcacaatg tacagaggga ttttatcata 180
caaactggcg atcctacagg gactggccgt ggaggagagt ctatcttttg ccaactgtat 240
ggtgatcaag caagcttttt tgaggcagaa aaagtcccaa gaattaagca caagaagaaa 300
ggcacagtgt ccatggtgaa taatggcagt gatcaacatg gatctcagtt tcttatcacc 360
acaggagaaa atctagatta tcttgatggg gtccatacgg tgtttgggtg ggtgacagaa 420
ggcatggaca taattaagaa aattaatgag accttggttg acaaggactt tgtaccatat 480
caggatatca ggataaatca tacggtgatt ttagatgacg catttgatga ccctyctgat 540
ttattaatcc ctgatcgatc accagaacct acaagggaac aattagatag tggtcgaata 600
ggagcagatg aagaaattga tgatttcaaa ggaagatcag ctgaggaggt agaagaaata 660
aaggcagaaa aagaggctaa aactcaggct atacttttgg agatgggtgg agacctacct 720

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226

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gatgcagata ttaaactctc agaaaatgta ctgtttgtgt gtaaattgaa cccagtgacc 780
acagatgagg atctggaaat aatattctct agatttgggc caataagaag ttgtgaagtt 840
atccgagact ggaagacagg agagtccctc tgttacgctt ttattgaatt tgaaaaggaa 900
gaagattgtg agaaagcatt cttcaaaatg gacaatgtgc ttatagatga cagaagaata 960
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accaagagtg atttcaagga gtatgaaaaa gaacaggata aaccacctaa tttggttctg 1080
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```

<210> 343

<211> 559

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (534)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (539)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (556)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (559)

<223> n equals a,t,g, or c

<400> 343

227

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caaaaaataa ataaataaaa ataaaagagt atactcctgg catgcttttt atctgagaag 60
atgtaaaaca gggaaaagaa cttcaggccg ttctctttgt ggctgagttt cattctgcct 120
gcgtggtgac agcagccttg agctctctgg gaattcacat cctgagcagt gtgctaggag 180
gatgcgaggg atgctggtga ctctgctgtg agtttgagct gcttctgcca aaaaactcac 240
gctcaggact cacaccttgt ctatatattt agttacatay aataaagatt ttttaaaaaa 300
tcacagattc agtgtgtatg aaatttttcta ctcttcacca attctgatga aattcaattc 360
ttcaggaggt tgagttttct ggaacaagcc acctctcttc ccttggagtg tcccatcact 420
tattctagca ccttttcatt ttgttcgaga tgtttgctga agcggagcgg tgctgtgggg 480
ggttacgcgc acctttcatc atcagtacaa tagcaggacc atagtgggtt agancaacnc 540
acagaggcaa agaaancgn                                     559

```

<210> 344

<211> 2623

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (547)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2623)

<223> n equals a,t,g, or c

<400> 344

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tattgacatc agtgtggagt cagtaattct tttcttagaa gctgaagtta tcattttacag 180
taaatttggt tttagttctt tgtcatcctt atttacctga agctccttca ggaaaattac 240
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caytetgacc aatcccagga tgcatagggr cccaggcaaa gcaggcccta gtaagtcctt 660
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ccacaagcgt aaggcatatg tcacttgccct ctggacactg gttattttat gtttcagtcc 1440

```

228

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ctaaaaaatg aaatggaaaa aagtgggtgct aaatcgagtc agagatatatta caggagagtt 1500
ttagagctta ttatttcctg tggccagtgc ttgtcctggc agtaaggcty tcccctgtaa 1560
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<210> 345

<211> 1843

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1405)

<223> n equals a,t,g, or c

<400> 345

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gagaagtttc ctcacattaa gctgacactc agcaaaatta ggagtctgaa acgagagatg 180
cggaaacttg gcaggaggac tgtggccttg aggagccac ggtggccatg gcctcgtcta 240
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gcatttaatt gacaaactgg aagagaagtt ccggtgaaac aggcgagaaac tgattgcctt 420
tgaattcccg gtgttagtggt ccttggaatt cgccctccac ttgcccagag acgaagtcac 480
gccccactac agacggcttg tccagagttc ctgacactgg ccccaggagc agccaagggc 540
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```


229

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gcgagttctg agtgttggat gagtcagtcg cgtggaagga cgtggagcgt ggcgctctgt 1320
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gaggcatgtc accacactgt cgctcatag ctgcaagaga gaggcaccag ctgaagttcc 1740
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aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaa 1843
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<210> 346

<211> 884

<212> DNA

<213> Homo sapiens

<400> 346

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tgtgcagggg gggctgggtga agggccctct ccgcaagggt gtagcaggaa aaggtccttg 180
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tgacaatttt gagaaaagggt ttgggatgta tattgctatg taatttaata aactgatttt 840
atggatataa aaaaaaaaaa aaaaaaaacc tcggggtcgg ggggt 884
```

<210> 347

<211> 391

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (360)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (381)

<223> n equals a,t,g, or c

<400> 347

230

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ggcacgaggc ggcacccctgc tccgtctgca ggttggtgctt ccggtgcgga ggtcagggac 60
aagatgggtgc caccgggtgca ggtctctccg ctcacaaagc tcggcccgta ctccgccctg 120
ttctctcggtg tggcctacgg agccacgccc tacaattacc taaaacctcg ggcagaagag 180
gagaggagga tagcagcaga agagaagaag aagcaggatg aactgaaacg gattgccaga 240
gaattggcag aagatgacag catattaaag tgagtgaccc tgcgaccac tctttggacc 300
agcagcggat gaataaagct tcctgtgttg tgtgataaaa aaaaaaaaaa aaaaaacyn 360
gggggggggc ccggwaccca nttygccaa a 391

```

<210> 348

<211> 2540

<212> DNA

<213> Homo sapiens

<400> 348

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ggcaggcaac aggaggtcct gaactagcca gttcagtact tagtccccta ttgaataag 60
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tgaggaggaac ttggatgaaa gccagagcag agtgccaaa agaacagttt attccaccat 180
atgttccacg attccgcaat ggctgggagc ccccaatgct gaactttatg ggagccacaa 240
tggaacaaga tctttatcaa ctggcagaat ctgtggcaaa tgtagcagaa catcagcgca 300
aacaggaaat aaaaagatta tccacagagc attccagtgt atcagagtat catccagccg 360
atggctatgc gttcagttagc aacatttaca caagaggatc ccacctggac caaggggaag 420
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231

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aatttttgtc attaaatggt atattatttc acatatataa aacagatggt atgtaagaat 2400
gttgtatatt ttaacataaa tcatttagag aaattatcta gattcattaa ttttcatagt 2460
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aaaaaaaaa aaaaaaaaaa 2540

<210> 349

<211> 1926

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (97)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (281)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (302)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (326)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1879)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1885)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1891)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1892)

<223> n equals a,t,g, or c

232

<400> 349

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gcagcaggac caggaagggg gagaggcggc caaggcggtc ccggaggasc cscaacaacg 180
gccccctgag gcggtcgcgg cggcgcctgc agggaccact agcagcccg tgetgagggg 240
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gnaaggccga gtatccccgc cggcgnagga gcagccccag cgccaggcct cccgacgtcc 360
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gacaggaaga cttggggcat gggacagctc agactttgta tttaaaagtt aaaaaggaca 1860
aaaaaaaaaa aaaggggcng gccgnttcta nnaggatcca agctttacgt accccgttgc 1920
aatgcc 1926

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<210> 350

<211> 1233

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1222)

<223> n equals a,t,g, or c

<400> 350

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aactcagtag aagataatgg caagtccaga ctggggatat gatgacaaaa atggtcctga 120
acaatggagc aagctgtatc ccattgccaa tggaaataac cagtcccctg ttgatattaa 180
aaccagtga accaaacatg acacctctct gaaacctatt agtgtctcct acaaccagc 240

```

233

```

cacagccaaa gaaattatca atgtggggca ttccttccat gtaaattttg aggacaacga 300
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ttttcactgg ggcagtacaa atgagcatgg ttcagaacat acagtggatg gagtcaaata 420
ttctgccgag cttcacgtag ctactggaa ttctgcaaag tactccagcc ttgctgaagc 480
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<210> 351

<211> 2510

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2503)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2509)

<223> n equals a,t,g, or c

<400> 351

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ctggagccca agctcttctc cacagaggac aagcaggcag cagagaccat ggggtcccct 120
tcagcctgtc catacagagt gtgcattccc tggcaggggc tctgtctcac agcctcgtt 180
ttaaccttct ggaacctgcc aaacagtgcc cagaccaata ttgatgtcgt gccgttcaat 240
gtcgcagaag ggaaggaggt ctttctagta gtccataatg agtcccagaa tctttatggc 300
tacaactggg acaaagggga aagggtgcat gccaaactatc gaattatagg atatgtaaaa 360
aatataagtc aagaaaatgc cccagggccc gcacacaacg gtcgagagac aatatacccc 420
aatggaaccc tgctgatcca gaacgtcacc cacaatgacg caggawtcta taccctacac 480
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234

```

gaagacctat aagctggagg tggacaactc aatgtaaatt tcaaggaaaa accctcatgc 1080
ctgagatgtg ggccactcag agctaaccac aatgttcaac accataacta gagacactca 1140
aattgccaac caggacaaga agttgatgac ttcattgctgt ggacagtttt tcccaagatg 1200
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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aangggggnc 2510

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<210> 352

<211> 2765

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2758)

<223> n equals a,t,g, or c

<400> 352

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ccgggaacgc cggggaaccg cagtagccgc ctgctagtgg cgctgctagc cggccggcgc 120
aggctgccga gcgggtgagc gcgcaggcca ggccaaagcc ctggtacctg cgcggtgcgg 180
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235

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agaga 2765

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<210> 353

<211> 1755

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (134)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (140)

<223> n equals a,t,g, or c

<400> 353

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236

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<210> 354

<211> 1959

<212> DNA

<213> Homo sapiens

<400> 354

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gcaggccagc cccatgggga agcgcagacg ccggmgcctg ggcgctctga gattgtcact 60
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gaacaacttt ggtaatgaag agtttgactg ccacttctc gatgaagggt ttactgccaa 240
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tgtggcagac ctgggagaca ttctaagaa acatctgagg tggttaaaag ctctccctcg 360
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237

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tgaggatgtg aaacttaaat ttgaagagat caccggcgta atcaaccag cgttggacaa 960
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gaaccccgac tccccaccg aagtagagga acaggatgcc agcaccctgc ctgtgtcttg 1500
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gccgccctag gggttcccaa gtttacgtac gctgcatgg 1959

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<210> 355

<211> 1067

<212> DNA

<213> Homo sapiens

<400> 355

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aattcggcac gaggtcactg ctggctgagg ctgcgctcag gcccgtggat ctcatcgaag 60
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acaccatgta gagaattttg gtctcgattc agaaaagaga aagagccagt ggttgttgag 180
acagtagaag agaaaaagga acctatccta gtgtgtccac ctttacgaag ccgagcatac 240
acaccacctg aagatctcca gagtcgtttg gaatcttacg ttaaagaagt ttttggttca 300
tctcttccta gtaattggca agacatctcc ctggaagata gtcgtctaaa gttcaatctt 360
ctggctcatt tagctgatga cttgggtcat gtagtcctta actccagact ccaccagatg 420
tgcagggtta gagatgttct tgatttctat aatgtcccta ttcaagatag atctaaattt 480
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gatcttttga tactttacca tgtgaaatac taccagaact gttctctaaa cccacttttt 660
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gttttgagag ggcactgtca acttgggttt aagacaggag gacattgcaa gttcacacct 840
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atagagttat gcattgcaca tacacaaata aacttttatt agatagatac ctataaaaga 960
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tagatttggt aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaa 1067

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<210> 356

<211> 1023

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

238

<222> (996)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (998)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1003)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1016)

<223> n equals a,t,g, or c

<400> 356

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gggtctggag ccccatcct cctgcggcag atgttcgagc ctgtgagctg caccttcacg 180
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gcgcctcggg atgcccagct gatcaaggag ctggggctgc ggctgctcta tgctgtgaat 300
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ggg 1023
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<210> 357

<211> 1953

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (45)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (47)

239

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1686)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1821)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1920)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1927)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1935)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1948)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1951)

<223> n equals a,t,g, or c

<400> 357

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gagccgaaga tggcagtga cgtatactca acgtcagtga ccagtgataa cctaagtcga 180
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ctacaagcag gttttaagag aatgggtggt gacaaaataa ttctgtgga caaattagta 420
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ggtgtggtgc gaaagaaccc tgggtgtgggc aacggagacg acgaggcagc tgagttgatg 720
cagcaggtca acgtattgaa acttactgtt gaagacttgg agaaagagag ggatttctac 780

240

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ttcggaaagc tacggaacat tgaattgatt tgccaggaga acgaggggga aaacgaccct 840
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ccaccangcc aggtngattc catgcctngc naa 1953

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<210> 358

<211> 2026

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (701)

<223> n equals a,t,g, or c

<400> 358

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cataagggcg gcgagatcag cctcctgtct catctggaag accaccactc tggggctctca 180
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gacatcgtca gagacgtttt ctctctact gggtgcaagc cgaaccttc cgggcaaac 1140

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241

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cagcccagcc ctatggccag gcctttgact gtggatgaga ttgtgggcca ggccttcac 1200
ttcctcatcg ctggctatga aatcatcacc aacacacttt cttttgccac ctacctactg 1260
gccaccaacc ctgactgcca agagaagctt ctgagagagg tagacgtttt taaggagaaa 1320
cacatggccc ctgagttctg cagcctcgag gaaggcctgc cctatctgga catggtgatt 1380
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aattttgaa aaatgtcact gaagtgattg aaagagtgcc tggcatgcaa ggataagagg 1920
ttctttacat aacatttcct aaatgcttaa taaacgtttg ttgcacttgg ttttgacatt 1980
gccaaaaaaa aaaataagaa gaaaatgaaa aaagttttgc gtcgac 2026

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<210> 359

<211> 1799

<212> DNA

<213> Homo sapiens

<400> 359

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242

gaaaatggaa aatatacaag taaattctgt tgaacccaaa aaaaaaaaaa aaaaaaaaaa 1799

<210> 360

<211> 510

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (417)

<223> n equals a,t,g, or c

<400> 360

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```

<210> 361

<211> 1087

<212> DNA

<213> Homo sapiens

<400> 361

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ccaaagtgtt gggattgtgg gcatgagctg ctgtgcccag cctccatgtt ttaatatcaa 60
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tggtgtcttt tagggtaaga agtttgtgtc tttgtctggc cacatcttga ctaggtattg 180
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caaccctgca atcacttttt ggaattgtct tgatttttct gcagttcaag ctatatcgaa 900
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aattgtgtat tttctttggg ggtggaaaag gaaaacaatt caagctgaga aaagtattct 1020
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aaaaaaaaa                               1087

```

<210> 362

<211> 2273

243

<212> DNA

<213> Homo sapiens

<400> 362

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agcgagagca ggggtgcccac cagctgcccc gagtgcagcg agcgactcaa cccgcacgac 180
atccgcttgc tgctcgccga cccgccgctt atgcacaagt acgaggagtt catgctgcgc 240
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cgtcaacaga gggcccagac ttacagagtt cggaccaaac acacttcagg tctcagttat 480
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```

<210> 363

<211> 1848

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (976)

244

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1845)

<223> n equals a,t,g, or c

<400> 363

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gacctcagtc acctattacc ggttggagga ggtggcaaag cgcaactcct tgaagggaact 180
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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa agggngga 1848

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<210> 364

<211> 1808

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1808)

<223> n equals a,t,g, or c

<400> 364

245

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aaaaaaaaa

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<210> 365

<211> 1280

<212> DNA

<213> Homo sapiens

<400> 365

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aatggaatag actctttgct gggctgcttg aggaacagag gcagagatct gaagacagca 120
tgtacacagc cattccccag agtggctctc cattcccagg ctcagtgcag gatccaggcc 180
tgcattgtgt gcgggtggag aagctgaagc cgggtgctgt ggcgcaagag aaccagggcg 240
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ccaacatcct ggaacgcaac aaggcgaggg acctggccct ggccatccgg gacagtgagc 660
gacagggcaa ggccaggtg gagattgtca ctgatgggga ggagcctgct gagatgatcc 720
aggtcctggg cccaagcct gctctgaagg agggcaacct tgaggaagac ctcacagctg 780

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246

```

acaaggcaaa tgcccaggcc gcagctctgt ataaggtctc tgatgccact ggacagatga 840
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<210> 366

<211> 2138

<212> DNA

<213> Homo sapiens

<400> 366

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tcaataaaaa gtacagcttg ctggaccaca tgcaggcaat gaggcggtag ctgcttcttg 120
gtcaaggwga ctttataagg cacttaatgg acttgctaaa accagaactt gtccgtccag 180
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247

attaaaaagca attatcttttc agatgcaaaa aaaaaaaa

2138

<210> 367

<211> 3179

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (475)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2488)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (3178)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (3179)

<223> n equals a,t,g, or c

<400> 367

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248

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<210> 368

<211> 1826

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1799)

<223> n equals a,t,g, or c

<400> 368

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taagtgcatt tactctcttc ctggcattga ttgggtgttac cagtggccag tactatgatt 180
atgattttcc cctatcaatt tatgggcaat catcaccaaa ctgtgcacca gaatgtaact 240
gccctgaaag ctacccaagt gccatgtact gtgatgagct gaaattgaaa agtgtacca 300
tggtgcctcc tggaatcaag tatctttacc ttaggaataa ccagattgac catattgatg 360
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aaaactccaa gataaaaagg agagttttct ctaaatgaa acaactgaag aagctgcata 480
taaaccacaa caacctgaca gagtctgtgg gcccaacttc caaatctctg gaggatctgc 540

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249

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agcttactca taacaagatc acaaagctgg gctcttttga aggattggta aacctgacct 600
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ttaaatcact cgaatacctt gacttgagct tcaatcagat agccagactg ccttctgggtc 720
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caaattatct tgatacatct aaatttgtct gggttaaaaa taggtggttag atattgaggc 1560
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tttctctttg attatttgca tgttatgttt aataagctac tagcaaaaata aaacatagca 1740
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<210> 369

<211> 839

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (112)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (179)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (809)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (829)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (831)

250

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (837)

<223> n equals a,t,g, or c

<400> 369

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acaagattca tctattttaa gaaatgttgg tgttctaata caaagcatta ttttcactna 180
gagaaaatta cttacttgct cccttctgta ttgtaatat ttgtattaag acatgattta 240
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gtattttaac tctggcaaag gttatagaaa gaaaaatggr aatatggtag gcctgtggta 360
ttcttaaaag ctaagtcatt agaactatgc agatcccca gtttaaaagt acaawtacag 420
caccagtagt tagctttcta gctgggggag aagacaggag atttttcttc cacagatggt 480
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taccataat gtactttaat aataaaaaac atggcagcca ggtgcagtag agtgcacctg 720
tggtcaggag gctgaagtgg gaagattgct tcaacctgtg agtttgagtc ccgcctggtc 780
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<210> 370

<211> 2315

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1259)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1261)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1299)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2300)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2304)

251

<223> n equals a,t,g, or c

<400> 370

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gtaaaaactg ctattatcag catcatagtt tctctaaaaa gaaaacttgg ggatcatagc 180
cgatagagag acttgctaaa atataaatca gcctctgcaa aactgtttac atattttattg 240
gtttacatat tttattgggt tatttctatc ccctgttcac ttttctctt ccacttccaa 300
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aggrtattta aggaagraga gratgactct gttattaaag gtggctggrg actgtggrgg 480
gataattttt waagcactac tcatacctt taactaaatt ttgccaagcc sgasacaaca 540
ttaaggagaa attgtacctt aagttagtaa ttccaaatct atctgagttg tatacccatc 600
aaagacaata cagttattaa catagatgaa ggtatgctat aggcattcatt cattatctct 660
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aactttatat cttgggactt atgtatatat atacctttta aataaaataa attttctaaa 2280
taaaaagtta aaaaaaaaaa gggnggccgc cctag 2315

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<210> 371

<211> 3007

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2984)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2988)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (3002)

<223> n equals a,t,g, or c

<400> 371

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253

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<210> 372

<211> 752

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (521)

<223> n equals a,t,g, or c

<400> 372

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aaacaagtca cttaaaaatc atcacctatt tataaactgt attaattaca cataatgctt 660
attgattcaa tgagggtttc cttaaagact ctgcttaata aatatggctg gacttcattt 720
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<210> 373

<211> 712

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (11)

<223> n equals a,t,g, or c

<220>

<221> misc feature

254

<222> (560)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (638)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (682)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (683)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (708)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (711)

<223> n equals a,t,g, or c

<400> 373

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atgtacccat tatcttagaa aatctagttt aaacctgntt tctttcccg caaaagaatt 660
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```

<210> 374

<211> 1807

<212> DNA

<213> Homo sapiens

<400> 374

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ggcacgagtt atggattacc tagatatcgg tggcttactc atgcttgga tttttttcag 60
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gactggcccc cagattcctg ctgtgttaga gaattcccag gatgttccaa acaggccac 180

```

255

```

caggaagatc tcagtgcacct ttatcaagag ggttggtgga agaaaatgta ttcctttttg 240
agaggaacca aacaactgca ggtgctgagg tttctgggaa tctccattgg ggtgacacaa 300
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aaaaaaaaa

```

<210> 375

<211> 1815

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (201)

<223> n equals a,t,g, or c

<400> 375

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aatgagggag ttcgggagaa ggaaaactcg gaccgactgg agtggatcca ggcgcacgtg 180
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cacctgggtg cagaagatca aggcggcgtc tgagcagtac atcgacaccg agaagaagaa 600
gcgtgagaaa gcttaccaag cccgctccca aaagacttca ggcatggggc gcctgatggt 660

```

256

```

gcatgtcatt gaagctacag aattaaaagc ctgcaaacca aatggaaaga gcaaccata 720
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tcccaagtgg aattttaact gccagttctt tattaaggat ctctaccaag acgtgctgtg 840
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aaaaaaaaa aaaaaa 1815

```

<210> 376

<211> 550

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (483)

<223> n equals a,t,g, or c

<400> 376

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ctcctgggac agagatctag atccagagag aacattcgtc cttccgatct cagctcagct 120
ctgagagccc tcccagagag cagctcccga gggctccaga gcctccgaaa gccctcccag 180
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ctgggcagtg aacttgagga gggcagggat tttgtctgtt cactgctggr gycccagcac 360
ccaraatact taaatctgag ttggatgaat ggcggccagc cactgggatt ccagggtttt 420
gggccccctg ccataacata tggcccargg cargcgccac atgctgggtc agtccccarc 480
ctnctgtyca caratccttc tctgttctac tccygggctg tkctcttcca cctcaactc 540
ggttctcagg 550

```

<210> 377

<211> 3202

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2957)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (3119)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (3192)

<223> n equals a,t,g, or c

<400> 377

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ccaagtctga accgagacct ccaatttccct ctccgagggc tccccagacc agagctgtca 180
agccccgact tcactcctgtg aagccaatga atgccacggc caccaagggt gctaactgca 240
gcttgggaaac tgccaccatc atcagtgaga acttgaacaa tgagggtcatg atgaagaaat 300
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actacattga caacctgctt gtcagggtca tggaagaaac cccaatatc ctccgcatcc 480
cgactcaggt tggcaaaaaa gcaggaaaga tgtaaatacag cagaaaaaaa acaccgagac 540
gtttctgtga cttcactttc acctgctcca ggggtcaagg acttgccctg cctgataacc 600
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atgatactta tttttgaatt tgtattttta aaactagatt tatagacttt tttttttttt 2220
aactagggca cttgcttccct tcttagctaa aagcaccagc tgagattttt caggtaattt 2280
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259

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ctatgaagtt gtttcatccg taagtacctt tgaaccaga agcccccttt ctcatatggt 1440
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ctgacttaga tccccacta ctgtttttct gtgagaagca gctatgcata attcctcttc 1560
aacacagtag ttcttgaaat tttgcaggcc tctcctggaa aggaggaaat gacttctctg 1620
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cctacccaaa caagtttttt gtttcacttc atctcttata aaacaatgtt ctaaagtaag 1920
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cacaggaaag gtgagaaata gcggatagtt cttatttcat agtactgtat atggaaataa 2040
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ctttcaaata aaccaacttt gtgaacaaaa aaaaaaaaaa aaaagggcgg gccgctctag 2340
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a 2401

```

<210> 379

<211> 852

<212> DNA

<213> Homo sapiens

<400> 379

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cggagccctt gcgccttttc cttgctcggg tcctgcgtcc gcgcctgcc cgccatgaat 180
gaggagtacg acgtgatcgt gctgggcacc ggcctgacgg aatgtatcct gtcagggtata 240
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cccagtgcaa tggggagagg aagagactgg aatgttgact tgattcccaa gttccttatg 420
gctaattggtc agctgggttaa gatgctgctt tatacagagg taactcgcta tctggatttt 480
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ttcctagtgt atgttgccaa cttcgatgaa aaagatccaa gaacttttga aggcattgat 660
cctaagaaga ccacaatgcg agatgtgtat aagaaatttg atttggtca agacgttata 720
gattttactg gtcatgctct tgcactttac agaactgatg attacttaga tcaaccgtgt 780
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gatttacatt cc 852

```

<210> 380

<211> 2014

<212> DNA

<213> Homo sapiens

<400> 380

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ccagtcggtt ttctttcatc ttgtagtatt tacagtattt ccactgtgca tatgcaaat 180
gggtattaca taactgtatc atatttggtt ttgataattt tttttttttt tgagacggag 240

```

260

```

tcttgcgtgtt gccaggctg gagtggagtg cgtgggtgtga tctcggtca ctgcaaactc 300
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gtgtgccacc rtgccagct aatttttgtg ttttttagtag agacggggtt tcaccatgtt 420
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ctgggattac aggcatgagc cactgtgccc agcctgggtat tgataattta tattcagata 540
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aatatattta ataattattat gtaattattc tttttatgca tgatacacct agaaaaatgc 780
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```

<210> 381

<211> 565

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (557)

<223> n equals a,t,g, or c

<400> 381

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cttggaaga aagaggagga acactggatt ctwactttct ggatcttrac actgggctgc 120
aaaacctacc ttctctctct ccgcctcccc tcacctcaa ctctcaatgt cttgctgtca 180
tttctgtct eggtctccct ctcctccctt ccccttcccc caccacacac ccttcacct 240

```

261

```

ctgtgtcctg gtccttctga gggccactgc agatgactct cctttgaaat gagaaaaaga 300
aaagaaagca agaacagaaa acgaagccac aggaagggaa gtagacattg tatgcttatg 360
gtttctcatt atgaaggtgc agcttgtagg aggtttgtac ggatgtgctt tgaagttatg 420
tatattacat ataacaggaa aaaatattaa aataaacagt gctggtaagt atgaagctga 480
cattctaaaa ttataattat ctgactgtga ttgatgtatc ctgaggttcc tagatcttac 540
tgaactggcc cagcttngga gacct                                     565

```

<210> 382

<211> 131

<212> DNA

<213> Homo sapiens

<400> 382

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gtcgacccac gcgtccgccc acgcgtccgc ccacgcgtcc gccacgcgt ccgaaaaaaaa 60
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120
aaggcgggcc g                                     131

```

<210> 383

<211> 2026

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2026)

<223> n equals a,t,g, or c

<400> 383

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ggtcccgag cttgccagtc tcgtcgcgag aagcagcggc ccggggcgac tgagcggaca 120
aacggaagtg taggttacgg tctgagacat caccgccaag ctgggcatcg gggagatggc 180
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gatgcaagat aaatttcaga ccatgtctga ccagatcatt gggagaattg atgatatgag 300
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agaactggaa agtgaaaaca agatacctgc caccgaaaag agttgaaggt tgctaataat 420
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cagtctttcc tttgagctag tgacttgaaa agaaagagag aaggaaaaga gaccatatta 1260
agtccatgcc agttgcttgg ctagaatatg atcaacgact tgtagtagac tcaagttttt 1320
aaaaaacact attttactta aactgtttct tatctaaatt cttgcagagt gtcaatgtta 1380

```


262

```

tcattgatta tagaagacag ggataatacc tttatctctg gccactcaaa aatgcagtg 1440
caggagtgt aaacctagag gccaatactg atgacctgga aggtgatcca tatgattgtc 1500
accacaaagt gcttttacac aaaaacttga aaatttgaaa aacatgattt ttttaagttt 1560
ctcatctcac cagtcttggg rtttatattg caaatctatc aaagtaagaa ataatttggtg 1620
ctgtatacaa attacatggg gaacataaag gagtggagatc cttctgtgat aaaatgaatt 1680
caccactctg gttacccaac tacagaacct cctttgatca ggccagtagg ttgtgatgca 1740
ggctggagcc cccgaatgcc ccacacacac tgcagcattg accagaccat ccgaaacctg 1800
cgtccctggt gatgttctca agcctcggaa gtggcaaatg gaaatgatat ggccggttgc 1860
ggttgttaga gagttgtgac ttaggcagga gtcgacctcc tcaagtaatg gaacgatttc 1920
aaaggcaggc tgccctgacc aaaaatatct gccatgaata aagggtgcctg aaatcctgct 1980
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaan 2026

```

<210> 384

<211> 1346

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (249)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (251)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1334)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1342)

<223> n equals a,t,g, or c

<400> 384

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tcgaccacgc gtccgcgcgc gcggcgccgc cgaggcgaag aaggaggagt gtgtgcggcg 60
gggccgcgcg ggtaaaggcg agaaggctgc aggagaccga gggggagccg ggccggtggg 120
gccgcgcgcg ccgccatgca ggaaatcatc gccagcgtgg accacatcaa gtttgacttg 180
gagatcgccg tggagcagca gctggggggcg cagccmctkc cscrgcagac acagcctcca 240
gcaaagcana naaccccgca ggtcatcggg gtcatgcaga gtcaaaacag cagcgcgggc 300
aaccggggac cccggccact ggagcaggtc acctgttaca agtgtggcga gaaaggacac 360
tacgccaaca gatgcaccaa agggcacttg gcctttctca gtggacagtg acagcagctg 420
gagccagctc cgagcagccc gggggccccc ctgttgggag tgtgcattta actgtttcat 480
gcgcttgttg gcgcgactgt ggctcgagct ggcccgcaga cactgtgggt tcatcactct 540
gagggggccac gtctgttagt ttcttatcat tttgccttag tattttttga aaaagggaca 600
tgtgtcctgt gggtccttgc agtcgacatc atgtttggct gggcatcgat gcctcctttc 660
tgggactccc ggcacaactc ccctcatcca gggagggagg cagctgctgg ggaggggctt 720
ggctaggtag ttctgtgtgg cgggtggtcat tcccctcatt aaacaccagt tcttggtgac 780

```

263

```
gccaggggct ggtaggtcat tcaaagctgt ggccagctca cgcctgcttc ctccctccct 840
gccctgctga atcctaaagc tgtgcctata tctgtgattt gaatgagga gccctttggg 900
gcaaattcag gtgcccccat tgccctcaggc tggccctggt ccaggtggc agcggttgag 960
gaggggtaca gggctctcaa gcctgaggtt ttcttctctg ggcttaattt tctcttggg 1020
tacgtgcctg acagtgttta aggtgtccgt tgaactggag ttgcagactt ttaaatagat 1080
gaccccttca gatcatctgt gcctacctcc tgcccatcag gcgtctacac tgctactcag 1140
acacctgtgg catgtggagg agactgccct gtcctgagcc tggaaaatgt gaaactgtct 1200
cctgcaacct gctgggcatg tgggcctggc tgtgttcaat tgcaagaaca atttttatga 1260
aatggattaa agcttgtttt ttaaaaaaaaa aaaaaaaaaa ytcggggggg gscctgtacc 1320
cattggccct tggngggggg tnttaa 1346
```

<210> 385

<211> 637

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (637)

<223> n equals a,t,g, or c

<400> 385

```
gccacgcgt tcgccacgc gtccgccac gcgtccgaat ttcacgtttt tatgtaagca 60
tgaacacag gcagtatgag agaaagcaag gcccgctcatg ctgtccgtac actacgtatg 120
ctgtagagcc attttgtatg ttgtgtaaaa caaaaagcat tgatgaaaaa gaaaaggtg 180
atgtatgtat atgagaaaat taattgtacg atatcattcc agtacgtttt gttgtacatt 240
ttagtcttgt ttactttctc ttcatgttta agaggatgag aactgtacag tttccagcta 300
gttaccata ttagagaaga aataagagag tattagaaga aaacaggaga gaaagaacat 360
ttgtgaattg cagttgtcaa aaaaaaaaaa tagcctagct ggccttattt gtgaagcata 420
attgctttta gcataatggaa gtattttttc acattttctt tgtataaaat ttgtattaaa 480
cttaaatatc tttttgatgg tgggtgtttct ttgtgactga gccagtagac tcacactata 540
tgcttttttg gggttgcccg ttccttcccc cccccccca gttttttcag atttytttac 600
ctttttttta ttaaactgtt ttggaaaaaa aaaaaan 637
```

<210> 386

<211> 862

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (723)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (760)

<223> n equals a,t,g, or c

<220>

<221> misc feature

264

<222> (780)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (809)

<223> n equals a,t,g, or c

<400> 386

```
ggggcagttg ccgcgggcgcg cgcgatccgg ctgacgcacg tggccccggg tcccccaagac 60
cagagcgggg ccgggagggg gggggaagag gcgagagcgc ggagggcgcg cgtgcgcatt 120
ggcgcgggga ggagcagggg tcttggcagc gggcgaggag gctgcgagcg agccgcgaac 180
cgagcggggc gcgggcgcg gcacccatggg ggagaaaccc gggaccagct caccgtgtac 240
ttgggcaagc gggacttcgt agatcacctg gacaaagtgg accctgtaga tggcgtggtg 300
cttgtggacc ctgactacct gaaggaccgc aaagtgtttg tgaccctcac ctgcgccttc 360
cgctatggcc gtgaagacct ggatgtgctg ggcttgcctt tccgcaaaga cctgttcacg 420
gccacctacc aggccttccc ccggtgccc aaccacccc ggccccccac ccgcctgcar 480
gaccggctgc tgaggaagct gggccagcat gcccamccct tcttcttcac cataccccag 540
aatcttccat gctccgtcac actgcagcca gggccagagg atacaggaaa ggcctgcggs 600
gtrgactttg agwtcgagcc ttctgtrcta aatcactaga agagaaaagc caaaaagga 660
actctgtgcg gctggtgacg cgaaagtgca ttgcgcccg agaaaaccgg gccccagctt 720
tanccgaaaa caaaaggcat tccttcacgt ctgaacggtt cctggaactt cgaaggtttn 780
ccttggaaaa aggagctgta cttaccatng gggagccctt tcaatggtaa aatgttccaa 840
gttaaccaaa aaaatttcaa cc                                     862
```

<210> 387

<211> 585

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (375)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (474)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (573)

<223> n equals a,t,g, or c

<400> 387

```
gctgcaaaca aaaagaatga agctcgactg agaattgtaa aaactcttga agacattgat 60
ctggggcccta ctgaaaaatg tgtgagagtc aactcagttt ccagtgggtc ggcggaagaa 120
gacctagaga ccccttttgca atcccgggtc ctcccttcca gcctgatgct accaaagggtg 180
gaaagtcctg aagaaatcca gtggtttgca gacaaatttt cattccactt aaaaggccga 240
aaacttgaac aaccaatgaa tttaatccct tttgtggaaa ctgcaatggg tttgctcaat 300
```

265

```

tttaaggcag tgtgtgaaga aaccctgaag gtcgggcctc aagtaggtct ctttctagat 360
gcagtcgttt ttggnaggag aagactttcg agccagcata ggtgcaacaa gtagtaaaga 420
aaccctggga tattctytac gcccgggcaa agwttkttgt catagegaaa cctnttgggt 480
ctccaagccg tagatctggg tgtacattga ctttcgagat gggagctggg gcttgcttag 540
gacagttcac ggaggaaggg agccgccatg ggnttttcac tgggt 585

```

<210> 388

<211> 591

<212> DNA

<213> Homo sapiens

<400> 388

```

gtgatctgca tgtggcaggg ctgcgcagtg gagcgccag tgggcaggat gacgagccag 60
accctctgc ccagtcccc cgggccagg cggccgacga tgtctactgt tgtggagctg 120
aacgtcgggg gtgagttcca caccaccacc ctgggtaccc tgaggaagtt tccgggctca 180
aagctggcag agatgttctc tagcttagcc aaggcctcca cggacgcgga gggccgcttc 240
ttcatcgacc gcccagcac ctatttcaga cccatcctgg actacctgcg cactgggcaa 300
gtgcccacac agcacatccc tgaagtgtac cgtgaggctc agttctacga aatcaagcct 360
ttgggtcaagc tgctggagga catgccacag atctttgggt agcagggtgtc tcggaagcag 420
tttttgctgc aagtgccggg ctacagcgag aacctggagc tcatggtgcg cctggcacgt 480
gcagaagcca taacagcacg gaaktccagc gtgyttgtgt gcctggtkga aactgaggag 540
caggatgcat attattcaga ggtcctgtgt ttttcttgca ggataagaag g 591

```

<210> 389

<211> 1096

<212> DNA

<213> Homo sapiens

<400> 389

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ggcagagcaa gatgggggct taccacacca tcgagctgga gccaaccgc cagttcaccc 60
tgccaagaa gcagtgggat agtgtggtac tggagcgcat cgagcaggcc tgtraccag 120
cctggagcgc tgatgtggcg gctgtggtca tgcaggaagg cctcgcccat atctgcttag 180
tactccag catgaccctc actcgggcca aggtggaggt gaacatccct aggaaaagga 240
aaggcaattg ctctcagcat gaccgggcct tggagcggtt ctatgaacag gtggtccagg 300
ctatccagcg ccacatacac tttgatgttg taaagtgc atctggtggcc agcccaggat 360
ttgtgagggg gcagttctgc gactacatgt ttcaacaagc agtgaagacc gacaacaaac 420
tgctcctgga aaaccggtcc aaatttcttc aggtacatgc ctctccgga cacaagtact 480
ccctgaaaga ggccctttgt gaccctactg tggctagccg ctttcagac actaaagctg 540
ctggggaagt caaagccttg gatgacttct ataaaatgtt acagcatgaa ccggatcgag 600
ctttctatgg actcaagcag gtggagaagg ccaatgaagc catggcaatt gacacattgc 660
tcatcagcga tgagctcttc aggcacagg atgtagccac acggagccgg tatgtgaggc 720
tgggtggacag tgtgaaagag aatgcaggca ccgttaggat attctctagt cttcacgttt 780
ctggggaaca gctcagccag ttgactgggg tagctgccat tctccgcttc cctgttcccg 840
aactttctga ccaagagggt gattccagtt ctgaagagga ttaatgattg aaacttaaaa 900
ttgagacaat cttgtgtttc ctaaactgtt acagtacatt tctcagcatc cttgtgacag 960
aaagctgcaa gaakggcact ttttgattca tacagggatt tcttatgtct ttggctacac 1020
tagatatttt gtgattggca agacatgtat ttaacaata aactaaaagg aaataatcwm 1080
mamrtaaaaa aaatgc 1096

```

<210> 390

<211> 448

266

<212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (76)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (132)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (394)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (439)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (447)
 <223> n equals a,t,g, or c

<400> 390
 tcggaggacg cgaaccggca cgctgcgctt ttaaggagtc cggctgggct gggcgccgga 60
 gctgggagcc gcgcgngtag gagcccggcg caggggccca gcccggggct agagaccgag 120
 ggccgggggtc cnggccccggc ggccgggaccc aggcgggttg ggctgggtcag gagtcagcca 180
 gcctgaaaga gcaggatgga tcttgatgtg gttaacatgt ttgtgattgc gggcggcacg 240
 tggccatccc aatcctggca tttgtggctt catttcttct gtggccttca gcactgataa 300
 gaatctatta ttggtactgg cggaggacat tgggcatgca agtccgctat gttcaccatg 360
 aagactatca gttctgttat tccttccggg gcangcctgg gcamaaamcc tccatcctca 420
 tgctccacgg attctcttnc cacaagnt 448

<210> 391
 <211> 1451
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (17)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (18)

267

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1429)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1440)

<223> n equals a,t,g, or c

<400> 391

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gtcgacccac gcgtccnncc acggteccggt ggggagaagc cgggaggact ggggtgcgcct 60
gcaggggatcg gaagccgggtt ggggtgtgag aggtttttctc gctctaggga gattcttcaa 120
gcaatcacta tgtcaacaga cacagggtgtt tcccttcctt catatgagga agatcaggga 180
tcaaaactca ttcgaaaagc taaagaggca ccattcgtag ccgttggaat agcgggtttt 240
gcagcaattg ttgcatatgg attatataaa ctgaagagca ggggaaatac taaaatgtcc 300
attcatctga tccacatgcg tgtggcagcc caaggctttg ttgtaggagc aatgactgtt 360
gggatgggct attccatgta tccgggaattc tgggcaaaac ctaagcctta gaagaagaga 420
tgctgtcttg gtcttggttg aggagcttgc tttagttaga tgtcttatta ttaaagttag 480
ctattattgt tggaaataaa ctaatttgta tgggtttaga tggtaacatg gcattttgaa 540
tattggcttc ctttcttgca ggcttgattt gcttggtgac cgaattacta gtgactagtt 600
tactaactag gtcattcaag gaagtcaagt taacttaaac atgtcaccta aatgcacttg 660
atggtgttga aatgtccacc ttcttaaat ttaagatga acttagttct aaagaagata 720
acaggccaat cctgaaggta ctccctgttt gctgcagaat gtcagatatt ttggatgttg 780
cataagagtc ctatttgccc cagttaattc aacttttgtc tgccgtgttt gtggactggc 840
tggctctgtt agaactctgt ccaaaaagtg catggaatat aacttgtaaa gcttcccaca 900
attgacaata tatatgcatg tgtttaaacc aaatccagaa agcttaaaca atagagctgc 960
ataatagtat ttattaaaga atcacaactg taaacatgag aataacttaa ggattctagt 1020
ttagtttttt gtaattgcaa attatatttt tgctgctgat atattagaat aattttttaa 1080
tgtcatcttg aaatagaaat atgtatttta agcactcacg caaaggtaaa tgaacacgtt 1140
ttaaatgtgt gtgttgctaa ttttttccat aagaattgta aacattgaac tgaacaaatt 1200
acctataatg gatttggtta atgacttatg agcaagctgg tttggccaga cagtataccc 1260
aaacttttat ataatataca gaaggctatc acacttgatg aattctcttg tctaactctg 1320
atttgcatc catggtgtta acatgggtata tgtattgtta ttaaagtaag tgacccatgt 1380
caaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaana aaaaaaaaaa 1440
aaaaaaaaa a 1451
```

<210> 392

<211> 1425

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (48)

<223> n equals a,t,g, or c

<220>

<221> misc feature

268

<222> (1332)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1381)

<223> n equals a,t,g, or c

<400> 392

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agttaataag taaaagctac taacaattaa aaaataaata aataaagnca agactgtctg 60
gaaaatggct ctctaaaag gaccagttgc catcatccac agtggaagat tcaaagcagt 120
tggtccttgg tacgtatgag aagcggattt cattcccttg aattctacag agcagtttat 180
tagagtgaat gcattttaag gccttgcatg tgatatgtca tccagttcat aatcaagttg 240
cctttttctg gctaaaacat aatgattatg tatttttctc atttggctct acaagctgct 300
ggccctttgt cctccactg tgggaatcag atctagagca ggctgagcct gcagacacag 360
cagtggccaa aaggtcactc taagtgtttt gtcttgactc cttacttgaa gtccaccag 420
ctagcacaca tctggtttat actgaagccc cctgcctaga aatactcatt tcaggaacca 480
ccagtaagca tctgtgacca cacaggcttt ttgactgatg gcttcccga tctggtttca 540
agggataacc cgtctgtgtg gcattctatg tcttctctct acagcgagga ctttgcagt 600
ctgcttgtgg tccacacaag gggctcagag ctgagcttga actgcttcat ggtcaccagc 660
tcctgtccct tccagtcttg agaggctttt ttctccagat ggaacctttc cttcccgcg 720
ttttctcggc ctctgctgtg ttttctcttg tgcccgctca attggacacc tcctggcttc 780
catctctgtg gttctcctgc ctcacttcct gttctgttgt ttttccgttt tgtcaaaata 840
tctctatgtg tcttgcttc ctttctctcg ccaggttttc agctttcctt tagctcttct 900
tctaataatg cttctgccc caaaagcctg ctctgtcagg atctcatggt tctccacttg 960
ccagaacctt cttcagctc agttcctcgg cctcaacttg tacgtttaac ccattgacca 1020
ccamccccca aattcacctt catttctttg accctgctcc tcaactcctt tctgttgarg 1080
aatctgttga ctaactccag gctcactcag gctcacgctc ctgctctctg caccagcctt 1140
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tttttagacct aaatggtttc cttaacgcca ttctaactgc ctgtgactca ttttacttta 1260
cagtgtttat tgtaacgcca aaccaacaaa tcacaggtgc ttgcttctct ccataaatct 1320
caacagtcta antttttgtc attcaacatg actcgtttat ccaacctgaa atcgcatata 1380
nccgcaaata tgggtgtagg gacttccgta gaagttccct tagat 1425
```

<210> 393

<211> 4755

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (124)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2562)

<223> n equals a,t,g, or c

<400> 393

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agcggcgcc agtggaacca catgcttggc tacctggcgg cgctggccaa ggctgcttc 60
```

```

ggcggaaca tgcagctctt cgtcttcttc aacggcgcg ctcagaaaagg cccggctgca 120
cgantgggtc aagcggcagg gcaacgagcg ccaracggca cagcagatcg tmagccatgt 180
ccagaacaag ggcaccccg cgcctaaagg ctggttcctg ccgcccgtyt gcatggccca 240
ctgcatccgc ctggcgctca tccgcttcca cgtcaagggt gcacagagca ttgaggatca 300
ccatcaggaa gtgattgggt tctgcagaga gaatgggttc catggcttgg ttgcgtatga 360
ctctgattat gcaactgtgca acatccccta ctatttcagt gcccatgccc taaaactgag 420
ccggaacggg aaaagtctca ccacaagcca atatctgatg catgaagtgt ccaagcaact 480
ggacctgaat ccaaatcggt ttcctatttt tgctgctctc ttaggaaatc acattctgcc 540
tgatgaagat ctggcttcct ttcattggag tttacttggg ccasaacatc cactagcctc 600
actaaagggt cgggcccacc agctgggtct gccaccttgc gacgtagtga tcaaagccgt 660
tgmtgactat gkacgcaaca ttyaggacac ctctgacttg gatgccatag ctaaagatgt 720
tttccagcat tcacagtcta gaacagatga caaagttatt cgatttaaga gagcaattgg 780
atattattca ggcactagta agcctatgtc atttcatcca ccacattact tagcagccag 840
acccggtccg tttggaatgc ctgggatggg gccgcgcgat gttcctcctc agatgctcaa 900
cattccgcag acctctctgc aagcaaagcc cgtggcccca caggtgcccc gcccaggggg 960
gcgcccgggc cagggtccat acccgtacag cctctctgag ccagcacctc tcactttgga 1020
cacgagcggg aagaatctga cggagcagaa cagctacagc aacattcctc acgaaggaag 1080
cacacgccgc tgtatgagcg gtccctcgccc atcaaccggg cccagagcgg caccccaacc 1140
acgtggatct cgcctcttcc cctggctctt ctacatcgtc atcttccgac aacgacgagg 1200
gcagcggagg ggcgacaaac catatcagcg ggaacaagat tggctgggag aagacgggaa 1260
gccactcaga gcctcaggca cgaggagacc caggagacca aacaaaggca gaaggctcgt 1320
ccactgcctc ttcaggaagc caactagccg aagcaaggga agccagatgg gcaactgtcca 1380
gccaatcccg tgccctctgt cgatgcccac caggaaccac atggacatca ccacacctcc 1440
cctgcccccc gtgcacctg agtgctgag agtgcccgag cacaggcaca agaaggggct 1500
gatgtacccc tacatcttcc atgtcctgac gaagggtgaa atcaaaattg ctgtttctat 1560
tgaagatgaa gccacaagg acctgcctcc ggcgcctctg ctctataggg cagtctgtca 1620
gtatgtttac ggagtcctgt ttagtttggc agaaagcaga aaaaaactg agagacttgc 1680
ttttagaaaag aacagacttc caccagaatt ttcaccagt atcattaaag aatgggcagc 1740
ttacaaagga aagtctcctc aaaccccgga actggttgaa gctcttgctc tcagggagtg 1800
gacctgcccc aacctgaaga ggctgtggtt gggtaaaggc gtagaggaca agaaccgcag 1860
atgagggcct tcctggcctg catgaggtcg gacacccag ccattgctca ccctgccaac 1920
gtgcccactc acctcatggt gctctgctgc gtcttacggg acatggtgca gtggccggga 1980
gcacgcatcc ttcggcgtea ggagctagat gccttccctg ctcaggcgct gtccccaaa 2040
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cagctatcag ctctcttcat gagtggagta gacatggcct tgtttgcaa tgatgcatgc 2160
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270

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 <212> DNA
 <213> Homo sapiens

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271

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<211> 3276

<212> DNA

<213> Homo sapiens

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<221> misc feature

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<220>

<221> misc feature

<222> (3260)

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<220>
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 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (3270)
 <223> n equals a,t,g, or c

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273

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<210> 396

<211> 1632

<212> DNA

<213> Homo sapiens

<400> 396

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274

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ctaagccgaa tt 1632
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<210> 397

<211> 808

<212> DNA

<213> Homo sapiens

<400> 397

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<211> 2428

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

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<223> n equals a,t,g, or c

<400> 398

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275

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<210> 399

<211> 2732

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (699)

<223> n equals a,t,g, or c

<400> 399

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ttgatgaagc aattgctgaa ttggatacgc tgaatgaaga gtcttataaa gacagcactc 240
tgrtcatgca gttacttagg gacaatctca ctgtaagtac tacttccaca gggtttatag 300
tctctttcct attcacctac ttaataattc actgttatct tcaagagggg atttgtacca 360
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agggagagaa ctaatgtttc tcgtgctttg tgatctgttc agtgtcactc tgtaccctca 660
acatatatcc cttgtgcatg aaaaaaaaaa aaaaaaana gaatcgtacg tcgactttcg 720

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276

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<210> 400

<211> 1362

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1175)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1250)

<223> n equals a,t,g, or c

<220>

277

<221> misc feature

<222> (1263)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1285)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1343)

<223> n equals a,t,g, or c

<400> 400

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<210> 401

<211> 1403

<212> DNA

<213> Homo sapiens

<400> 401

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aaaagaaata attttatttt tcccctttgg ggagatatta tcctctaata tgagaatcag 240
atccctagat tctattttct cctatactat taaactcaac cttgaacctg agcttggttg 300
ttctgtgcct tagtttctcc actcgtaaac aatttcctat aaaaattgtt taaacaccaa 360

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278

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ccaaaattta ccatatgtat tcattctctt gccttaaaga tcacttctta acttacattt 420
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catgttttcc tcacaaaata tattgtaatc tgattttcct atcttgtatt catgcagaaa 540
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<210> 402

<211> 2387

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1257)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1316)

<223> n equals a,t,g, or c

<400> 402

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279

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<210> 403

<211> 4062

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (111)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (4061)

<223> n equals a,t,g, or c

<400> 403

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281

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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaacaaaaa na 4062

<210> 404

<211> 861

<212> DNA

<213> Homo sapiens

<220>

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<222> (11)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (25)

<223> n equals a,t,g, or c

<220>

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<222> (734)

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<220>

<221> misc feature

<222> (746)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (767)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (769)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (820)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (849)

282

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (854)

<223> n equals a,t,g, or c

<400> 404

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ggttttcaaa  tgctttttt  ttcagtcttc  aaataagtg  ttacgtagaa  gcaccatata  180
tgaaacaggt  gacagtggac  cagtctgaat  gaaatgaggg  ttggcaggcc  tgagctccaa  240
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cagcagggtt  tctttacttt  cactgagtgg  ctggtgcctg  cacactgagt  tttgcaggct  540
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ctgcccaact  tgcnagtgt  ggacnaggac  ccagcaagcc  caaaacngnc  accttgga  780
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```

<210> 405

<211> 1030

<212> DNA

<213> Homo sapiens

<400> 405

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cgcgggaaag  ccaaggagga  gggcagctgg  aagaaattca  tctggaactc  agagaagaag  180
gagtttctgg  gcaggaccgg  tggcagttgg  tttaagatcc  ttctattcta  cgtaatat  240
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gaattttaagc  ccacatatca  ggaccgagtg  gccccgccag  gattaacaca  gattcctcag  360
atccagaaga  ctgaaatttc  ctttcgtcct  aatgatccca  agagctatga  ggcatatgta  420
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ttaccaatc  ttaccatgga  cactgaaatt  cgcataagat  gtaaggcgta  cgggtgagaac  960
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agtgaattcca  1030

```

<210> 406

<211> 2428

283

<212> DNA

<213> Homo sapiens

<400> 406

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atthttgttt gttctttttgt attcactttct ggtctcttta agactgtttt aaaagaaatc 180
aatttaggga accccagtta tataatataa actttgtaat ctgagagaaa aaatgtatag 240
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tagaagggtga tgttttggtt ttgttttccc agaggctgcc atatggtctt tgagtacggg 360
gatgtcccaa actggccac caatgagcat ggcggctccg gccaggaatg ccagagttag 420
cctcccaggc ttgcgggtgg acatgcctgc tccctgccag cctccagtgg cctggccagg 480
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gactgaaacc aggcattctc ccggacctca gcgtggggga gcctccaggc agacgctggg 660
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```

<210> 407

<211> 2047

<212> DNA

<213> Homo sapiens

284

<400> 407

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ttcctgcagc cgtctcagct atgacaagtt ttttgaagat aaattatcaa attgcctctt 180
taatgctcca ttgcctacag atatcatatc cactccaatt tgtgggaacc agttggtgga 240
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ccaatttaaa aaggctggga tgggtgtgcag accagcaaaa gatgagtgcg acctgcctga 420
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ttgccatcac ggggaaggcc actgcttgat ggggacatgc cccacactgc aggagcagtg 540
cacagagctg tggggaccag gaactgaggt tgcagataag tcatgttaca acagggaatga 600
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acaaaacata aaaacatcac actaatcttg gaggaataag aaaaattgta catccattaa 1680
atgtacaatt gattgcaaca tcttgattgt tttaaccatt aacttgtcaa attacaatca 1740
cagttaagaa aatgatgtaa aattctgttt tgtggatctc tttcctagat tagcttctga 1800
aatcattatt agctatatca tttgaggttt tctacaattt ggtataacta agaattttaa 1860
aatgttttat catatatatt tgtataatta attactggca tgggttaaagt ggttttctact 1920
ttttaaatgg agaaaatttc agttaaatga ataggataaa ccagggttgcg aactggtgac 1980
ctgtaggcca tgtttgcact gcaaatatat ttggtctgaa tgatattgaa aaaaaaaaaa 2040
aaaaaaaaa 2047
```

<210> 408

<211> 892

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (21)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (33)

<223> n equals a,t,g, or c

285

<220>

<221> misc feature

<222> (855)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (868)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (891)

<223> n equals a,t,g, or c

<400> 408

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tcggaacttt taactgaaaa tgagagacag aagccacagg ggaagcaaag caaataggat 240
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tggaagtgat ttttcctctt ttaaaagtaa acaaaattct tcaaatatgc cctagttaac 720
tatttcagca taccattttt acttggttaa cagtgtacat tttgataacc tatcaggaat 780
gaataaagta tttttattta aagggtgaaa aaaaaaaaaa agggcgggccg ytytagagga 840
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```

<210> 409

<211> 696

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (675)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (676)

<223> n equals a,t,g, or c

<400> 409

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ttagagagcc tctcactccc ccaccccaa aaatgtctac tattcatgac agtaaccaat 120

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286

```

tattctggac aaattgcttc tttttaattt gagctatctg ccatggactt tctaaaatgg 180
aaacacagcc tgagtgtatc ttagggagag tttagattgaa aaaatccaaa tcactatcca 240
tatagatcat ggatataaag agatacctga tttttattaa aaagatactt tttcaaattt 300
aagagttaat cttggaaatt tggacaagt aaaggggcaa gtaaaccttt tgatgaaata 360
taaaaggaac tcattgcatg aagttgacta tcaaattctg tgatgtgtgg cttcttaaaa 420
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gttttttctt ctaattttca cttcagcagt gtttagggct tcagatgcct tattccagtg 540
tgaacagaaa aagttcatat tttatgtggt taatgctttg atgtgtcaca taaagagtag 600
ttttagataa atgttggcac aattttaact tcttagtggc tgtgacatta tatattatat 660
atataraaac tatannaaaa aaacaaaccc gggatt 696

```

<210> 410

<211> 1885

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (741)

<223> n equals a,t,g, or c

<400> 410

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tcgacgagag cgcggtggcc gagagcagag aggagcggat gggcggcgcg ggcggcgagg 1680
gcagcgacga cgacacctcg ctacactgag cgccgcaccg cttcagggaac ggagacagga 1740

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287

ccggcgagcc ctggggcggc ggccgctcct gcactttctc ccctccccc cccggcacct 1800
 ggtggcaccg ggccaggccc aggcgggtgc tgcagcctgg ctggacagag ccccaataaa 1860
 cgatcccaca gcctcaaaaa aaaaa 1885

<210> 411

<211> 584

<212> DNA

<213> Homo sapiens

<400> 411

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 gttgatgaag ctgggatttg aatcttcaca tgtgtgtact tataaatata aatgtaagga 480
 aaactctagt gagtccacct cttatattga gttattactg tgtgagtgcc aagtwctgtt 540
 ttagatgctt tacatatact attttgttta atatcctttt taaa 584

<210> 412

<211> 1412

<212> DNA

<213> Homo sapiens

<400> 412

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 agccaatgat ccctttgtct ttaatgtata gaaaatactg ttgttccttt tgcattttcc 180
 agtgacatct gttttctaaag cagctccttt ctagggagga aaccaaaggg gctagggtta 240
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 ccacccttgg gagtggcctt gtggagctgg ggacaagggt ttgtttacta catagtgcac 360
 atgataaatg gccttaaaact gtgattcctt ctggtaggat aagttataat aaactgaccc 420
 taaagaatgc aatggccttt aaactgcagt tactgtgttc ttaatgaagc aatacccaaa 480
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 ggtttctttt gcaaagcttg gtcatttggc ccaggctctc ctggaaagtg gagtacatgt 720
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 ggcagctaac attaagagaa gggggaaaga gaagaagaga gcaatagctt atgggagagc 960
 tgagatctta cttcgttgac ccatattttt cccctgacca agttacctgt aaactggaat 1020
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288

<210> 413
<211> 364
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (363)
<223> n equals a,t,g, or c

<400> 413
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gctggaattc tactcttcac ttactgcatt gactgttggt gattagttat tattgcaaag 120
cactgtcacc ggcctcaggg agtttatgtg taatagaatt aaaaataata gctgtgtata 180
acacttagct caagccacgc atgtgtgagg catttggtat gtatctgaat taattctcac 240
taaaattcag caaaggactt gatagcctct cccgccttt tcaataaagg atgaatgaag 300
gttgaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaacccc gggggggggcc 360
ccnt 364

<210> 414
<211> 1333
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1140)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1196)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1210)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1246)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1285)
<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1287)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1306)

<223> n equals a,t,g, or c

<400> 414

```

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tctgtggccg gggattgtgc agacagaact gctgaaggag catatggcaa aggaggaggt 180
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gataccagct ccattctaca gatggcaaaa ctgaaaccca gagagggtta gaaacttggt 420
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tgctggcatn ctggggacct tgcttcgacg ctatgggcct tcgggnatgt gggaccgggc 1260
cgccccggtc caagaactat ttggnctttt gaacctctgg gtcctnttta acaacgtggt 1320
tcccgggccc tgg                                     1333

```

<210> 415

<211> 3146

<212> DNA

<213> Homo sapiens

<400> 415

```

tctcttaciaa gttgaagctg catggggcct agaaactttg catcttgaac tttcgaacaa 60
cctcaagaag tagttcagtc cacatgtgtg gccactttcc ctgaggcttt tccaattacc 120
ccaattcgaa ttgcctgtgg caaggagtgt tggccattgg gaaatatcat aggtgttggc 180
ccccagtgtg gagttatgtt cataagtctt tgagttggaa acctttactt tccttcataa 240
gtccatctat tcctataaca ttcttaagaa atgttacttg ggttatggtc aacttatgtc 300
gccacaaaga cccaccacca ccaatggaaa ccattcagga gattcttcca gccctttgtg 360
ttttaattca tcacacagat gtaaataatac ttgtagacac agtctgggcc ctctcttacc 420
ttactgatgc tggcaatgaa caaatacaga ttgtaataga ctctggaata gttcctcatt 480
tggttcctct gctcagccac caggaagtta aagttcagac tgctgcactt agagctgtgg 540
gcaacattgt tactggaaact gatgagcaaa cacaagtagt tttgaactgt gatgctcttt 600
cacacttccc agcactcctg acacatccca aagagaaaaat taataaagaa gcagtgtggt 660

```

290

```

tcctctccaa catcactgca ggaaatcagc agcaggtaca ggcagtaatt gatgccaatc 720
ttgtaccaat gataatacac ctttttgata aggggggattt tggcactcaa aaagaagctg 780
cttgggcat aagtaactta acaattagtg gaaggaaaga tcaagtggct taccttatcc 840
aacaaaatgt tatccacact ttttgcaact tgctgactgt aaaagatgca caagttgtgc 900
aagtagtact cgatggacta agtaatatat taaaaatggc tgaagatgag gcagaaacca 960
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acatgggttaa agtttaaaac tagaagcagc agaaaactag cttgtaaaat ttatccaagt 3060
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aaaaaaaaac gagggggggc ccgtac 3146

```

<210> 416

<211> 594

<212> DNA

<213> Homo sapiens

<400> 416

```

acatacgaaa tttgacaggt attgtatacc ctttggatct ttaggaatta atttttgcct 60
ctgtcactca gctttgtata ttttgaaatg gagataagta tagggaggtc ttggaaggaa 120

```

291

```

aattgccaga attcccaaac catgtaacac tcattgagaa ttccagatcc attatatcta 180
aagggcaagt gaaggaaaca gtattgtgaa ctgggtataa ctccttggtt cttaactagt 240
acattcttaa tctgtgagac ccaaagggtg ataaacaata atttaagatt gtacagtact 300
ctaaacgtct gcaaaggctt agatgttatc agtatcacta gtttttattt ctgccagtag 360
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ctatggcaag ttcattaaaa agcttgctcc attgttatct tcaagtaatg cccataagga 480
gatggaagat atctgagaca attaaggctt tagcttctag gcaagagaaa taacgttgca 540
ttaaatttca agtttctttc tgctagactt gaatgtgtct agccactcta attt 594

```

<210> 417

<211> 562

<212> DNA

<213> Homo sapiens

<400> 417

```

gggaaggggtt ccaagcctct aaaaatgtgc tttgtgatca ggagtgcgct ccaaaccaaa 60
tacgcgcgct gccctttcga ggccagttag ctcagcctcc aaggctttta agccacattt 120
cagcaagaga aagcgcctgag agctcgagg ttcattaaag aaggcaaagc actggtttct 180
ctccttagaa aagtaggttt cttggcttga tgtagactgg cttgctttga tttttagtga 240
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ggatggatgg atggatggat gtatggatga atagatagat ggtgtttgca tgtaaattgc 360
agagaaaaca aaaccaaagc tgattggaaa caattaattg tgggtgtctg agggggaagg 420
tcgcagcttt gggcagcttt gagaagcggg acaagagttc tgtgcctgtg tgtccagccc 480
tggagccagc cagtgcattt attttaagct cttagaagca actccttggc ccaggaatgc 540
gtgacccttg agatgggtcc ac 562

```

<210> 418

<211> 1412

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1218)

<223> n equals a,t,g, or c

<400> 418

```

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agctctccct gtccagccgc ctgcagctga ccctgtacca gtacaagacg tgtcccttct 180
gcagcaaggt ccgagccttc ctgcacttcc atgcctgcc ctaccagggt gtggagggtga 240
accctgtgct cagggtctgag atcaagttct cctcctacag aaagggtgcc atcctggtgg 300
cccaggaagg agaaagctcg caacaactaa atgactcctc tgtcatcatc agcgccctca 360
agacctacct ggtgtcgggg cagcccctgg aagagatcat cacctactac ccagccatga 420
aggctgtgaa cgagcagggc aaggaggtga ccgagttcgg caataagtac tggctcatgc 480
tcaacgagaa ggaggcccag caagtgtatg gtgggaagga ggccaggacg gaggagatga 540
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tggagggtgc cgtggccaag tacatgggtg cagcggccat gtacctcatc agcaagcgac 720
tcaagagcag gcaccgcctc caggacaacg tgcgcgagga cctctatgag gctgctgaca 780
agtgggtggc tgctgtgggc aaggaccggc cttcatggg gggccagaag ccgaatctcg 840

```

292

```

ctgatttggc ggtgtatggc gtgctgctg tgatggaggg gctggatgca ttcgatgacc 900
tgatgcagca cacgcacatc cagccctggg acctgcsagg ggagagggcc atcaccgagg 960
ctccccagcg cactgaatgt cccccgcgca gagcagaggg aaggcaagcg gaagacgcca 1020
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ctacatcctg tgggtggggg ccctcgacag gacagcagga cggtttggtt tcagtggaat 1320
cccatccctg ggttccctg gtccccactc ttcccaagcc tcccgggact gggacatgtt 1380
tgcaataaag gaaagggttg tggcgccaaa aa 1412

```

<210> 419

<211> 1939

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1872)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1884)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1889)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1924)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1929)

<223> n equals a,t,g, or c

<400> 419

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gtcggtcgag tgtggcctgt gtggactcgc atcttgcccc aagccgggcg gaggagagct 120
caagctaagg gtgatcagcc catgacctaa acctccagac aaaataaaac ggaaaatttg 180
ctagaatcaa gaatgatgga tccatgttca gttggagtcc agcttcgtac tacaaatgag 240
tgccataaaa cctactatac tcgtcacaca ggttttaaga ctttgcaaga attgtcatca 300
aatgatatgc ttttacttca acttagaact ggaatgacac tttctgggaa caatacaatt 360
tgctttcatc atgtaaaaat ttacattgac agatttgagg atttacagaa gtcattgtgt 420
gacccattta acatacacia gaaattagcc aaaaaaaatt tgcattgtaatt gacttagat 480
gatgccactt ttctgagtgc taaatttgga agacagcttg tacctggttg gaagctttgt 540

```

293

```

ccaaaatgca cacagataat caatggaagt gtggatgttg atactgaaga ccgccagaaa 600
aggaaacctg agtcagatgg aagaactgct aaagctttga ggtcattaca atttacgaat 660
ccaggaaggc aaactgaatt tgctccagaa actggtaaaa gagaaaaaag aaggcttaca 720
aaaaatgcaa ccgctgggtc agacagacaa gtgataccag caaagagtaa ggtctatgat 780
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aagaagtcac tgaccatggg aatgttggtc ttgctgctgt gtattcatag gagcttagtg 1740
aaggcaaact taccaacaca aataagcaaa gtggttgcaa taaagacaga tacgtcccag 1800
aggaagtgat ggtaaaaaa aaaaaaactt tacmttaaaa grtatttaat gtgaatatr 1860
raatattyca cnacmttgaa agcnccagnc ataaaggggtg gaagctggcc ccaacttaga 1920
agngtatng cagttgccg                                     1939

```

<210> 420

<211> 576

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (545)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (550)

<223> n equals a,t,g, or c

<400> 420

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ggaaggctga ggtgtgcgcc tttttttttt ttccttctta gtctgtgtga catcattggg 60
aatggaggga aataaatgac tggatggctg ctgcttttta agtttcaaat tgacattcca 120
gacaagcggg gcctgagccc gtgcctgtct tcagatcttc acagcacagt tcctgggaag 180
gtggagccac cagcctctcc ytgaataact gggagatgaa acaggaagct ctatgacaca 240
cttgatcgaa tatgacagac acygaataac acgactcacc cccctccagc acctctacct 300
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atgggctggt ctggctcgggt tcccatgtgt ctggccagtc tctrtgtgtc ttaatccctt 480
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ggggncccg tacccaattg ggccttttag gggggg                                     576

```


294

<210> 421
<211> 951
<212> DNA
<213> Homo sapiens

<400> 421
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ataatctgta atgttatgaa gacctatcaa aaagttttta aagtatttct gtcttcaaag 180
gtagtaagac aggattaaat ttttattaga atagacaaat cagtgaatgg tatgcatgta 240
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tttgatcaag atgatrtaaa tggccttact tgggttttta tcgtttatca aatcttacat 360
acaaaagagt ggaagtattc ctttacaaaa tttctaagga aaatatttct tccaatctat 420
cacaattata gaatggatat atgtttctga aaagtttttg aaagaaagca aaagttctag 480
aactaaagta agctgggtatt taatatcccg ttgatattta gaaaagattg ttaataagaa 540
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acttgttttg attgagagtg tgacatacat gttaaatcag attagcttgt ttctttttaa 660
tatacatata cacaaataca tataattttt tcyccytttt gttgtgcata tcyctatgca 720
tttttaaact tttagatttg tgaatgacct atgtgtaaat ttttgttttt ataaaccaga 780
aattatacaa gttttaatgt gtgtcaagaa cttgttccat acaactgtgg tatcgagcaa 840
taatgttaat aacttttggg attatataaa ctatgcttaa taatttgtat tgagaattgg 900
taccactata caatactttt ttctgtatt aaatctttta aataccaaaa a 951

<210> 422
<211> 673
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (12)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (76)
<223> n equals a,t,g, or c

<400> 422
gccgaaatga antaaacggg gtaaactc cctgctgcc cctccctctc tctccctctc 60
tctccctctc tctttnaccc tcccagggc tccatctccg cctcaggggc ttctccacc 120
caartctggc tccattcctg gycwtctgtt ggtgacagac cccccctaa ggtgctcgtt 180
tgggggctct tcaggcagca cctcagcctg gcacccccac tcccctgcgc agccccagg 240
cctcaggacc ccacccctct gagggccagg ggagccctgt tcacgctggg ttctccccag 300
gacctatgag ctctctgggt ggctggggc ttgctgtggg actggccctg ctctgtact 360
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tcatcatcga cagacatgtc agccgtacc tgctggcctt cctggcagat gacctagggg 480
ggctctgaca gacctgggac ccagggcctc acctgccact caaccaaaga gtctctgagc 540
cgccccgcca aggggactgc tgcttctttt tctaaatgca tatttttcat tatttataat 600
ttgtgtaaaa aacacacctt caccttaciaa ggtgctgacc atattaaatg ttcagggttct 660

295

ctcaaaaaaaaa aaa

673

<210> 423

<211> 2073

<212> DNA

<213> Homo sapiens

<400> 423

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ggtgccatcg gcacttcctc ccccgccctc ctcgagtgcc aagaagggtg tggaccagcc 60
cgcccttccc tactgggtgcc ccctcctccc cggcmaaggc gcctggacct ggcgaggacg 120
ctgcccgcgc agcggactga ttgcagagt ctgtacatag tgtatattgc tctaccgcgc 180
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tccccgcgcc cctccccage ccatcttact gcaagcagcg tcctgaggag acagcggcac 300
gttctagctg cgtctgctgc cagcccgctg cagtggagtg ggctccgcgt tgctcattct 360
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tgtgccagct cccttccttc cccgttstcc tgtccccaca gccattcttg gagctgggga 480
acctggtctc aaggcaggcc ctgcagttcc acagagggtg caggtcttgc cctttggcca 540
acagatttct tgctctgctt tctagatgcc tctgagctcc aaaccaggg cagccatggc 600
ttctcattta caccaacagg tttcagttcc aacagaaagg tcggggtagg ttcgtgcaga 660
gatggggctg gcaggggggc tatgggagga ttattttaac agatcaagaa aatgaagcca 720
aatcaagtga attaaattcc tcacaattat tttctttccc tgaggtttga ttggcacagc 780
agcaaaagtt gaggccaccc cacttggtgc cactgttttt agaaaaaat gaatggcttc 840
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aaaaaaaaaa aaaaaaaaaa aaagggcggc cgc 2073

```

<210> 424

<211> 2609

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (31)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2585)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2602)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2609)

<223> n equals a,t,g, or c

<400> 424

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gacgacatgg cattggggca tgtgattgtg ttgcttcagc aagagtggcc acggggcgag 1920
```

297

```

aatcttttcc tgaaagctgt caataaaatt tgccaacaag gaaattttcca atatgagaat 1980
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gcctgtgtaa ttgtaggaga agacactcag cagtgattgc catggcacag agccgtgggtc 2340
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agttcccaag agtctgagaa gctatttcta tttttaagag tcattttttg taatttttgt 2460
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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 2580
aaaanaaaaa aagaaaaaga anaagaaan 2609

```

<210> 425

<211> 987

<212> DNA

<213> Homo sapiens

<400> 425

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agacctcatc tcttaaaaaa taaaaataa aaagtctaag aggatacaca gaaattttta 180
agtggttacc tccacggaat gggattaggg gatcagaggt gagggaaactc atgggttggc 240
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agtgtatatt ctatgaaatg gaagaaacaa gaactagaca ggtcacaaa tgctgttgat 660
cacagacaat ctctgccatc cataaggtaa atgtaataca tctggcgacc tgctgagtg 720
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aatgcttacc ttaaatcatg tgacattgtt tatcttggat taaaagaaaa gaaaatgtat 900
ttattttgtg catattttca ataaaatata taaaatcgag ttggtatata gtgccaata 960
ccattaatta aaaatatttt aacctga 987

```

<210> 426

<211> 1726

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (15)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (21)

<223> n equals a,t,g, or c

299

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catgctcata gaggagaact tcctcaggtc tgtggctgta cgatgcatgg gaggcattcg 720
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gagctacaaa agaagataag cccaagga gaaattagcc tgagcactgt ggagttaagt 840
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```

<210> 428

<211> 2055

<212> DNA

<213> Homo sapiens

<400> 428

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aagaggacag tgatagatgc atttkcccca ggctgtctca gaaaggctcg taaatgtata 60
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tggctggtgt ttgcagtccc acgtggcatg gcctccagcc caaccacag tggagactgg 480
agacagggca atgagtctgg tcgggggcac gtggacatgc cccatagggg ccccaccag 540
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```

300

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tgagtttaag gagcactaag ggtaatgata ccaatgaggg ttggttttatt atcaaacctg 1620
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<210> 429

<211> 355

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (348)

<223> n equals a,t,g, or c

<400> 429

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ggcagagcag gcaccagctc gcatggctgc tgggcattggc cattggcggg tctragtgtg 60
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gctgtccttg acattctgat gtggtgaaat ggtagcagc atggactttg gaaccagata 300
gacctagata caaaccacag tctaacattg ctwaccctgt gaaccttngg ggcaa 355

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<210> 430

<211> 2834

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (18)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2828)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2834)

<223> n equals a,t,g, or c

<400> 430

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attaaaaaga tgtggcatag ggaacaaatg aagagtgaat cccgggaaaa gaaagaggca 360
gaagatagtt tacgaagaga aaagaacctg gaagaagcaa agaagattac cattaataat 420
gatccaagtc tcccagagcc aaaatgtgtg aagattggtg cgttagaagg atatagaggc 480
caaagagtaa aggtgtttgg ctgggtccac aggtgcgca ggcaaggaaa gaatttaatg 540
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302

<210> 431
 <211> 2709
 <212> DNA
 <213> Homo sapiens

<220>
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 <222> (402)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (2677)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (2691)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (2699)
 <223> n equals a,t,g, or c

<400> 431
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303

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<210> 432

<211> 739

<212> DNA

<213> Homo sapiens

<400> 432

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ggaggtcctg ggactccaag ttcagcgtc caggtctggg acagggcctg catgcagtca 660
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atttgtctgc tcaaaaaaa 739

```

<210> 433

<211> 853

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (734)

304

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (758)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (767)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (833)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (851)

<223> n equals a,t,g, or c

<400> 433

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agaggggaat gtggtgactc accctgcgtg gtggggggag ggcagggcca tgccaggcgc 180
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gcaaccacct nat 853

```

<210> 434

<211> 1098

<212> DNA

<213> Homo sapiens

<400> 434

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catctacttc gtatgactat tgcagagtgc ccatggaaga cggggataag cgctgtaagc 180
ttctgctggg gataggaatt ctggtgctcc tgatcatcgt gattctgggg gtgcccttga 240
ttatcttcac catcaaggcc aacagcgagg cctgccggga cggccttcgg gcagtgatgg 300
agtgtcgcaa tgtcaccat ctctgcaac aagagctgac cgaggcccag aagggttttc 360

```

305

```

aggatgtgga ggcccaggcc gccacctgca accacactgt gatggcccta atggcttccc 420
tggatgcaga gaaggcccaa ggacaaaaga aagtggagga gcttgaggga gagatcacta 480
cattaaacca taagcttcag gacgcgtctg cagaggtgga gcgactgaga agagaaaacc 540
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```

<210> 435

<211> 1178

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (917)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1176)

<223> n equals a,t,g, or c

<400> 435

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cctgtgcctg acaccagtt gacagatgtg tagggaacaa aattatgacg ggatggccac 180
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gtggtaggag ccaccctgat taagttcttg ttgagaataa actggtgcac cagacattta 420
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ccctcatacc tgtctcttgc tgaggccctc gtcgcagggt agccatgtct gacttccgag 540
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```

306

<210> 436
 <211> 686
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (364)
 <223> n equals a,t,g, or c

<400> 436
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 gagcgggtcta tgagtgaaaa tgctgttcgc caaaatggac agctggtcag aaatgattct 180
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 ggagctaatac tttcctctgc tcgtggcatt ttgtcgctta tccagtcttc tactcgtagg 300
 gcataaccagc agatcttgga tgtgctggat gaaaatcgca gacctgtgtt gcgtgggtggg 360
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 gatacaacca ttgaaggaac gtcagatgac ctgactgttg tagatgcagc ttcactaaga 480
 cgacagataa tcaaactaaa tagacgtcta caacttctgg aagaggagaa caaagaacgt 540
 gctaaaagag aaatggatcat gtattcaatt actgtagctt tctggctgct taatagctgg 600
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 atataaaaga tttgcaaact taaaaa 686

<210> 437
 <211> 2588
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (2481)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (2505)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (2542)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (2544)
 <223> n equals a,t,g, or c

<400> 437
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307

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aaaagaca 2588

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<210> 438

<211> 3609

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (32)

<223> n equals a,t,g, or c

<400> 438

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309

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<210> 439

<211> 2643

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2630)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2633)

<223> n equals a,t,g, or c

<400> 439

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310

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aatgcactga acagcctgtc cgagaaccag tccctgctgc ggatgccacc ctgggtgaac 1260
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```

<210> 440

<211> 637

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (564)

<223> n equals a,t,g, or c

<400> 440

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ttcagcctgc caaagtgcta ggactatagg cgtgaaccac tacacctggc ctataatatt 180
ttcttacgga aatgagatct cactgtgttg ctcaggcttg tcttcaactc ctgggctcaa 240
gcaatcctcc tgccctcgcc tcccaagatg ctgggattac aggcgtaagg cactgggcct 300
ggaccataa ataaagtttt attggaagac agtcattctc atttaagtga ttttggtcac 360
atttgccta cagtggcaga gttgagaagc tgtaacagag accatgtggc ctgcaaggcc 420
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ctgtaatccc agctactcgg gagtctgagg caggagaatc gcttgaacct gggaggtaga 540
ggttgagtg agccgagata gtgnccatgc gctccagcct gggcaacaga gtgagactcc 600
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```

<210> 441

<211> 2595

311

<212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (64)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (82)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (1222)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (2398)
 <223> n equals a,t,g, or c

<400> 441
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 agggaccagt gggaggaccg gatccagggtg tggcatgcgg aacaccgtgg gatgctcaaa 180
 gataatgcta tgttgggaata cctgaagatt gctcaggacc tggaaatgta tggaatcaac 240
 tatttctgaga taataaaacaa gaaaggaaca gacctttggc ttggagttga tgcccttgga 300
 ctgaatatatt atgagaaaaga tgataagtta accccaaaga ttggctttcc ttggagtga 360
 atcaggaaca tctcttttcaa tgacaaaaag tttgtcatta aaccatcga caagaaggca 420
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 atgaaggccc agggccggga ggagaagcat cagaagcagc tggagcggca acagctggaa 600
 acagagaaga aaaggagaga aaccgtggag agagagaaag agcagatgat gcgcgagaag 660
 gaggagtga tgcctgcggct gcaggactat gaggagaaga caaagaaggc agagagagag 720
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 ccccgccacg cttgtcttta gtgctccaag tctaggaact cctcagatc ccagttcctt 1500
 tagaaagcag ttaccaaca gaaacattct gggctgggaa ccaggaggc gccctggttt 1560
 gttttcccca gttgtaatag tgccaagcag gcctgattct cgcgattatt ctgcaatcac 1620

312

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ctcctgtggt gtgctgggag caggactgat tgaattacgg aaaatgcctg taaagtctga 1680
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caggacttcc atctgtgcca tacttgttct gtattcgaaa tgagctcaaa ttgatttttt 1800
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cagctggcag agagcacagt gatcaccagc gtgagtgggtg gaggaggaca cttggatatt 1980
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tcgtgcactg ctttctcctt cacagctaag atgccaatgtg caggtggatt ccatgccgca 2520
gacatgaaat aaaagctttg caaaggcaaa aaaaaaaaaa aaaraaaama aaaaaaama 2580
aaraaaaaaa aaaaaa 2595

```

<210> 442

<211> 1301

<212> DNA

<213> Homo sapiens

<400> 442

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ggcacgagga ctgattgccc cttggggtca tatgttgga tgcaccaggt aggccagccc 60
tgccattggg gcattagtaa atgtgcctgt gcgtgggtct cggccaaca cagttgatat 120
acatttgttt acctgttata gttgcaagtt gtacaggctg acattgcctc gatcgacagt 180
gatgctgtcg ttcacccgac aaacactgac ttctacatcg gtggtgaagt aggaaacacg 240
ctggagaaga aaggtggcaa ggagtgtgtg gaagctgtcc tggaactccg gaaaaagaac 300
gggcccttgg aagtagctgg agctgctgtc agcgcaggcc atggcctgcc tgccaagttt 360
gtgatccact gtaatagtc agtttggggg gcagacaagt gtgaagaact tctggaaaag 420
acagtgaaaa actgcttggc cctggctgat gataagaagc tgaaatccat tgcatttcca 480
tccatcgcca gcggcaggaa cggttttcca aagcagacag cagctcagct gattctgaag 540
gccatctcca gttacttcgt gtctacaatg tcctcttcca tcaaacgggt gtacttcgtg 600
ctttttgaca gcgagagtat aggcattctat gtgcaggaaa tggccaagct ggacgccaac 660
taggctgagc aatgacagaa ccagctgcac catgtacccc accttcagtt taaaagaaaa 720
aaaaaatccc cttcactcct actgggaggt gggaccctt ccattttcag ttttgctcat 780
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tggtttcccc cctcagaaga atcatgaatt tgcaacagac ctaatttttg gttacttttt 1140
gtcttattga tggatttgaa aatgaaagat ttaataaggc aaagcagaat ctgttgcctt 1200
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```

<210> 443

<211> 689

<212> DNA

<213> Homo sapiens

313

<220>

<221> misc feature

<222> (678)

<223> n equals a,t,g, or c

<400> 443

```

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aagttggtgc tttgtgggaa ggagaacagc gggagagccg taagkaacgc agcgtcctga 120
cgtgaggaac gcctcttaac acgccccgtg gcatggagtt tgacagggcc ctggatccct 180
gcgttcaccc ctcttgaggt cctggacgcc cacctgggag cagcgtcagg gccgtgccac 240
tttgaccac gttaaacgca ttgcatctc atttctgtgt cccatctaga tgcttgactc 300
agtgatgcag aacctttcag agttagctgg aagccacagc cctgcctctt gatgcagcct 360
ggatccagcc ggtgtgaaga ggagaccct tccctcttgt ggggtttgga tcctgtgttt 420
ctagcctttg caaaactcta catcagggat atcctggaca tgaaggagtc ccgccagtgc 480
cagtgtattt ttgtacaagg acatccaata aaacaggtag atgtcttggg aactgtcatg 540
gagtggagaa aagagatgct ttctacagtt awggagtggg tgacarcact kgagttataa 600
actgcattct ctgggaaaaa gttgaatact gagtctgtaa tcagctgctc caagtggcaa 660
gcaagagagc tcagcttnaa cctcacaac                                     689

```

<210> 444

<211> 395

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (380)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (384)

<223> n equals a,t,g, or c

<400> 444

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cttgaacctg aagaggcgga ggttgacagt agccaagatc gcgccattgc actccagcct 60
gggggacaag agtgagactt agtctcaaaa aaaaaaaaaa agaaaaaaaa atcaggggata 120
tagttcatat ccacttctt tgtttacacc gatgtccctg aatatcagcc tgtagctaata 180
ggacttgga tttctggtct aagtgggcct cctggggatg ggggtggtaca ctgagcttct 240
gagcctcatt gtagagtaga aaggtagctg ggcctgtgtg gtaagccttg ttgaaatgct 300
ctgggtattc gtattgcctt aataaacttc acccacaact gcaaaaaaaaa aaaaaaaaaa 360
aaaaaaaaaa aaaaaaaaaa ccnngggggg ggccc                                     395

```

<210> 445

<211> 1558

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

314

<222> (420)

<223> n equals a,t,g, or c

<400> 445

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gtggcaccac cgacagaggg gcacggatcc cacgtatggg cccaatggct gcttcaaggc 120
cctggatgac atcttaaact taaagctggg tcatatcttg aacatgggtca cgggcacccat 180
ccacacctac cctgtgacag aggatgagag tctgcagagc ttgaaggcca gaatccaaca 240
ggacacgggc atcccagagg arkaccaggm gctgctgcag gaascgggccc tggcgttgat 300
ccccgataag cctgccactc agtgattttc agacggcaag ttaaataarg gccacacatt 360
ggacatggat cttgtttttc tctttgacaa cagtaaaatc acctatgaga ctcagatctn 420
cccacggccc caacctgaaa gtgtcagctg tatccttcaa gagcccaaga ggaatctcgc 480
cttcytcarr ctgargaarg tgtggggcca ggtctggsac agcatccaga ccctgaaggga 540
agattgcaac cggctgcagc agggacagcg agccgccatg atgaatctcc tccgaaacaa 600
cagctgcctc tccaaaatga agaattccat ggcttccatg tctcagcagc tcaaggccaa 660
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gtttgggata acatcagata aactgctgct ggccctggagg gaaatggagc aggtgtgtga 780
gctctgtggg cgggagaacg aatgaaactc ctggtagaac ggatgatggc tctgcagacc 840
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aagaagagtg aagaactggt ggctgaagca cataacctct gcacctggt agaaaatgcc 1380
atacaggaca ctgtgagggg acaagaccag agtttcacgg taacagcttg tgtgagactc 1440
ctgcatctcc atgtcctttc tttctatggc aaaaatagaag agaaaatgga aatgcaatct 1500
ggcattatcc tcaaccccaa aaaaaaaaaa aaaaaaaaaa aaaaagtcgt atcgatgt 1558
```

<210> 446

<211> 3085

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (62)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (3077)

<223> n equals a,t,g, or c

<400> 446

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cntcttgagg gcttaaagtt ttctgtacct tgtgatgaat gttaatagggt gtttttatta 120
tacaaagctg aatgtcattt ctggtttgta gctttctgtc actcattcca tcttccttca 180
gacatcacca cgtttctcta aagtcagaaa acattccggt ttgggtctttt tcaaaaagggt 240
```

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cccaaagtct gactctaca catgaaggcc ctctcacaca gacgtgacgt cctgccagaa 300
agagaatgaa tgacagaaaa aaaaaagaga gacaaactct aggaacaatg ccgattcatt 360
ccacgcagca gtattggggg tgggttcggg gaggggtgtt tcggattttc ttttttytt 420
ttctttmtt ttttttttt tgcagcaacc attaataaat gccaccacat tctaccagca 480
caaggaaaca taggcagcac tgaaaaaaaa aaaaaaagct catattaatt agactgacaa 540
tatggccttg gaaggctctc ccttgtggaa ccaagttgcc atgggccttg ggtgctctgc 600
gataacgggt gtgggttggt tttgtttgca aaatggccaa aaaaaaaaaac cggcttcccc 660
gagcagctgc cctgaaagta ggggtggcgg cggcggcgct gagtttatac attagttag 720
acctacttgg tggcattaaa ctgtttgaat gcaaatcga tttcagattg aacttgtaa 780
gggagttaac gagggctgag ttcagcaaat gctaaagtgt taatttcaa tatgcaaat 840
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gatcaaagga ggcaaaagaa tttagaggca aatgacaagc gataggctat tgcaacctga 1260
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taaaggagct acagaaggaa gggagtccca tctcaaaaa aaaatgaatg tatgccactg 1500
caattagagt atccaataaa ggagacagtt tagagtcagg acagaaaagc ttccataatt 1560
gaactagatt acataatagt atttctagaa aaagagatat ttttagattg tatgccactt 1620
ttgtttaaga actgtgctgt gatcactgta ttaattttgg tttatcttgg catatatcct 1680
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catgatgtgc aggcagtagc cagacagggt catgggaagg gggccctgtg cttctaaact 1980
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tacctcagtt caaaccttta gggaatgatt aaaattttaa aaaaaaacat ttactcagt 2160
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ttaatctgtt ttttgataca ttctatccc ttgtgtttat cctaccactg cttctctggc 2880
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tctgtctgca gtaaatattt tgcatgatga aattccaggg tcacactttt ccaagtttat 3000
cagtgaagta gtgattaaca atggggagtg tcaaaactat tgaacttttg tataaaaaaa 3060
aaaaaacttt acaaggngcc aagat 3085

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<210> 447

<211> 1917

316

<212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (1915)
 <223> n equals a,t,g, or c

<400> 447
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<210> 448
 <211> 946
 <212> DNA
 <213> Homo sapiens

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 gccttagcag tcctgtgtta gcattgcttt actctgggca catttttctt attctctatt 180

317

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<210> 449

<211> 1190

<212> DNA

<213> Homo sapiens

<400> 449

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gttatgggtt ttattcatat atttttatag cacctttttt tggaacctat atttgtgctt 180
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<210> 450

<211> 915

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (915)

<223> n equals a,t,g, or c

318

<400> 450

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```

<210> 451

<211> 1862

<212> DNA

<213> Homo sapiens

<400> 451

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320

<220>

<221> misc feature

<222> (2094)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2096)

<223> n equals a,t,g, or c

<400> 453

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<210> 454

<211> 2288

321

<212> DNA

<213> Homo sapiens

<400> 454

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<210> 455

<211> 2361

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

322

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<220>

<221> misc feature

<222> (2260)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2288)

<223> n equals a,t,g, or c

<400> 455

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323

caaagtgact gacatttatt ttaattttgc tttgtntttn ttawtttct ccccatcc 2280
yttatttngg gttattcctg actcacttga cactctctga tgcctgagag attcctgttt 2340
gggatttaat atccagggt g 2361

<210> 456

<211> 957

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (26)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (32)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (41)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (47)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (49)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (50)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (61)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (64)

<223> n equals a,t,g, or c

<220>

<221> misc feature

324

<222> (67)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (70)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (73)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (75)

<223> n equals a,t,g, or c

<400> 456

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gcgcgcccc tcttttaaaa aacttngggg gnaccccccc ngggggntrn caagggaaat 60
ntcngnncan cgnangcggc cccaatcggc acgagcggcc atggcgctcc tgctttcggt 120
gctgcgtgta ctgctgggcg gcttcttcgc gctcgtgggg ttggccaagc tctcggagga 180
gatctcggct ccagtttcgg agcggatgaa tgccctgttc gtgcagtttg ctgaggtggt 240
cccgctgaag gtatttggct accagccaga tccctgaaa ctaccaaata gctgtgggct 300
ttctggaact gctggctggg ttgctgctgg tcatgggcc accgatgctg caagagatca 360
gtaacttggt cttgattctg ctcatgatgg gggctatctt caccttgcca gctctgaaag 420
agtcactaag cacctgtatc ccagccattg tctgcctggg gttcctgctg ctgctgaatg 480
tcggccagct cttagccag actaagaagg tggtcagacc cactaggaag aagactctaa 540
gtacattcaa ggaatcctgg aagtagagca tctctgtctc tttatgccat gcagctgtca 600
cagcaggaac atggtagaac acagagtcta tcatcttggt accagtataa tatccagggg 660
caaccagtgt tgaaagagac attttgtcta cctggcactg cttcctcttt ttagctttac 720
tactcttttg tgaggagtac atgttatgca tattaacatt cctcatgtca tatgaaaata 780
caaaataaagc agaaaagaaa tttaaatcaa ccaaaattct gatgccccaa ataaccactt 840
ttaatgcctt ggtgtaagta tacctctgaa cttttttctg tgcctttaa cagatatata 900
ttttttttaa atgaaaataa aaccatatat cctaaaaaaa aaaaaaaaaa aaaaaaa 957

```

<210> 457

<211> 923

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (886)

<223> n equals a,t,g, or c

<400> 457

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aattcggcac gagggcaatc cgggcttgca gacgaggtaa ggtcgattcc atttgccccg 60
gggatggtca cagcgcgggg ggccggaact gccgtgcgag gcgcggtcgt tgtcgatttg 120
ctctcggccg cactcgcgct gtacggggccg ccactggagc cagttttaga aagagcgttt 180
tcgctacgta aagcacattc gataaaggat atggaaaata ctttgagct ggtgagaaat 240

```

325

```
atcatacctc ctctgtcttc cacaaagcac aaagggcaag atggaagaat aggcgtagtt 300
ggaggctgtc aggagtacac tggagcccca tattttgcag aatctcagct ctcaaagtgg 360
gocgagactt gtcccacgtg ttctgtgcca gtgcggccgc acctgtgatt aaggcctaca 420
gccccgagct gatcgteccac ccagttcttg acagcccca tgctgttcat gaggtggaga 480
agtggctgcc cgggctgcat gctcttgctg taggacctgg cttgggtaga gatgatgcgc 540
ttctcagaaa tgtccagggc attttggaag tgtcaaaggc cagggacatc cctgttgtca 600
tcgacgcgga tggcctgtgg tkggtcgctc agcagccggc cctcatccat ggctaccgga 660
aggctgtgct cactcccaac cacgtggagt tcagcagact gtatgacgct gtgctcagag 720
gccctatgga cagcgatgac agccatggat ctgtgctaag actcagccaa gccctgggca 780
acgtgacggt ggtccagaaa ggagagcgcg acatcctctc caacggccag cagggtgcttg 840
tgtgcagcca ggaaggcagc agcgcaggtg tggagggcaa gggganctcc tgcggggctc 900
cctggggcgtc ctggtacact ggg                                     923
```

<210> 458

<211> 3058

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (14)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (15)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (24)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (27)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (418)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (3045)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (3053)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (3056)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (3057)

<223> n equals a,t,g, or c

<400> 458

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tctctaataa gcanngcttc tacnganatt csttgctttg ctattttttac aaaacagcat 60
tgattgaagc aagtcttggg ttactaagg tagggtagca tttgctattg gtaaagagaa 120
taaatacact taatttcaca atacattgtt atatgtaccc cagttgttgt tagtggggac 180
tatgatactg taataatatt tttaaaaatt tacatcaaga gaggcagtca ttcacgatgg 240
ttttgtgccg gctcttttta gggtttttga tcacattaga gatattttaga acatattacc 300
ctgtgactta cgtaggaaac ctaatatgct gagtatctgg cacttgaatt cctgctttta 360
ttgctggagg tccacatctg tggttgacct ctgttattgt ttaaaaaaaa taaataanaa 420
ttaaaaaaat ctgtgcaata attttaaaat gtgctcccag gaatagacac aaatgttttg 480
cagtatcttt taagctgcat tttcctttag tgatgcattt gtcaattgca ctgaatttaa 540
atctgaaagt cagaggtgat tattgatagt acttttgtat tttgatatgg acagtttatt 600
catttgcata cagttattga ctttttccca gctgattaaa agatagtcaa gaaattctgc 660
aatatagctg ccaaaataga cagctacatt tttatgatat tgctatcttt tctgtttytt 720
ttttcttttt tttcttttagc tattttactt aagcataata gccacaatag gacataataa 780
agattataaa tacagagctt tattatcctg acgtcttggg tcttttaagt atatactttt 840
ctgaaaggta tccattttgt aggcttgggt tcttcatgag catacgattg tttatttttg 900
ctgctgttct caacatcatc attgctgct gatgtgccac gatgctgctc caatagacag 960
caataagatt gtctctaatt tgagcagtaa catgattgca agagaccaag tttcacagct 1020
tgtaaagttc tgtatttggg attcttgctt atttttccgc ctgtgttttt ctgagaactt 1080
attcctgatg atcaattgaa tccagtagtt tttctatgct atttgttgtt gtataagcta 1140
ctgtaagaaa cttatcataa ggaaaaatag aaaggaaaac ttgaatcaat actcattgat 1200
taaaatggaa taaagaaaga gcagctgcca ctttttaaca acataaagga atatcttttt 1260
ttgtctccgt gtaggaaatc ccataagttc ttatatattgt tccagttccc atttcctgcc 1320
attgaccaga taacatcatt gactttcaaa tgacttttag aagtgataac tcttaatttc 1380
ctaatagata ctagattgta ttgaattctg ttttaattat tctctaggta agtatgtttt 1440
aggattaaat acctttttaca gatactgaaa gtgcctcctt ttgtggtgta aaaaacaaat 1500
tatggtgcaa aaagtaatca ctagattgaa atacatgaag gttttttgct ttttgacata 1560
cgaaaatgtc aagagaaagg ccaaagattt gtactttttc acttacaag cactcctttt 1620
tcccttaaac ttctttctgt caaattagat ttaatgagag agtactattt ttaaggagct 1680
atctgtttat gtagaatgat tttgttaaga gtaatgtaaa ctattattga gtagaggcct 1740
aaagaggact gtgcattttt gctattttaa ggaatcacia atgatcatac ttaagtgagc 1800
aaaaatgaca agttttacta gctaagtaga gaaataaatc tcaaatgcag cgctacaatt 1860
ttcattatct taagtacatt gtacatttct acagaacctg tgattattct cgcattgata 1920
ggatgggtact tgcataatgt gaattactac tgttgacagt ttccgcagaa atcctatttc 1980
agtggacca cattgtggca tggcagcaaa tgccaacatt ttgtggaata gcagcaaatc 2040
tacaagagac cctggttggg ttttcgtttt gttttctttg ttttttcccc cttctcctga 2100
atcagcaggg atggaaggag ggtaggggag ttatgaatta ctccttcag tagtagctct 2160
gaagtgtcac atttaatatc agtttttttt aaacatgatt ctagttaaat gtagaagaga 2220
gaagaaagag gaagtgttca cttttttaat acactgattt agaaatttga tgtcttatat 2280

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327

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cagtagttct gaggtattga tagcttgctt tatttctgcc tttacgttga cagtgttgaa 2340
gcaggggtgaa taactagggc atatatTTTT ttttttttTg taagctgttt catgatgttt 2400
tcttttgaat ttccggataa gttcaggaaa acattctgca tgttgatatc agtctgatgt 2460
acttatccat ctcattacaa acaaaaacac acagactgca tttgtagctc tgtaatcctt 2520
gaatacggaa gttaaattttc ttctttcctg actttgacat tgtagctata ctgtttccat 2580
ttttgttttt acaaatcctt tgggtctaata tctgtgagcc tacctatagc actggattaa 2640
aatgtctgca tcatttcttt agttatccag ttaactttaa aactgttgta aaagtgtaaa 2700
ccagcccatg acaggttttt gtacatgtta aagaacttca ttgttcagtt ttcattgatta 2760
ttgtgtaagg aagactgatg tagatgttct gtgctgtcct ggaccatgtt aattacactt 2820
acgacgtatt ttagttccac atcacaatga tttgtcccca gtgacctttt taccctttct 2880
aggcacattt cttgttggtg ttgttggtgc agttcccctt tgcattgtat tgctttgaca 2940
actgtaattt gaatcagatc tgaaagaggt ccagaataaa atatatTTTg atattaaaaa 3000
aaaaaaaaaa aaactcgagg gggggcccgt acccaatcgc ctgtnatgta tcntannc 3058
```

<210> 459

<211> 555

<212> DNA

<213> Homo sapiens

<400> 459

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aaactggaac aatgaaaccc aaacactttc accacacttt gggcttttga tttctcacar 60
rgggargtta accmaactyc caaaggttta ataccycaa cmccttcccc ttgagtgtga 120
cycacattgt taggtgctga cctagacaga ratgaactga ggtccttggt ttgttttggt 180
catatacaaa ggtgctaatt aatagtattt cagatacttg aagaatgttg atggtgctag 240
aagaatttga gaagaaatac tcctgtattg agttgtatcg tgtggtgtat tttttaaaaa 300
atttgattta gcattcatat tttccatctt attcccaatt aaaagtatgc agattatttg 360
cccaaagttg tcctcttctt cagattcagc atttgttctt tgccagtctc attttcatct 420
tcttccatgg ttccacagaa gctttgtttc ttgggcaagc agaaaaatta aattgtacct 480
attttgatata tgtgagatgt ttaaataaat tgtgaaaaaa atgaaataaa gcatgtttgg 540
ttttccaaaa aaaaaa 555
```

<210> 460

<211> 612

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (595)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (599)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (600)

<223> n equals a,t,g, or c

328

<220>

<221> misc feature

<222> (606)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (612)

<223> n equals a,t,g, or c

<400> 460

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ggccactcag agtgggtgtc ttgtgtccgc ttctcgccca acagcagcaa ccctatcatc 60
gtctcctgtg gctgggacaa gctgggtcaag gtatggaacc tggctaactg caagctgaag 120
accaaccaca ttggccacac aggctatctg aacacggtga ctgtctctcc agatggatcc 180
ctctgtgctt ctggaggcaa ggatggccag gccatgttat gggatctcaa cgaaggcaaa 240
cacctttaca cgctagatgg tggggacatc atcaacgccc tgtgcttcag ccctaaccgc 300
tactggctgt gtgctgccac agggcccagc atcaagatct gggatttaga gggaaagatc 360
attgtagatg aactgaagca agaagttatc agtaccagca gcaaggcaga accaccccag 420
tgcacctccc tggcctgggtc tgctgatggc cagactctgt ttgctggcta cacggacaac 480
ctggtgcgat ktggcagtga ccattggaca cgctagaagt tatggcagac ttacaaataa 540
aaaaaaactg gctttttgaa aaaaaaaaaa aaaggcggcc gtttaaagac caacntacnn 600
ccctgnttca an 612
```

<210> 461

<211> 882

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (852)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (877)

<223> n equals a,t,g, or c

<400> 461

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tttccttctc cctttcttgg ccctcctctg ctccctccca caccctgcag gcaaaacaag 60
gaagagatca tcaattatga aatttgaaca ccaagggacc tgggtgtgcct gggcctgagc 120
agcatcggtg gcgtctggtg cctgctgagg aagcactgga ttgccaacaa cctttttggc 180
ctggccttct cccttaatgg agtagagctc ctgcacctca acaatgtcag cactggctgc 240
atcctgctgg gcggactctt catctacgat gtcttctggg tatttggcac caatgtgatg 300
gtgacagtgg ccaagtcctt cgaggcacca ataaaattgg tgtttcccca ggatctgctg 360
gagaaaggcc tcgaagcaaa caactttgcc atgctgggac ttggagatgt cgtcattcca 420
gggatcttca ttgccttgct gctgcgcttt gacatcagct tgaagaagaa taccacaccc 480
tacttctaca ccagctttgc agcctacatc ttcggcctgg gccttaccat cttcatcatg 540
cacatcttca agcatgctca gttatgagga gtcaaatcct aaggatccag cggcagtgac 600
agaatccaaa gagggaaacag aggcacagc atcgaagggg ctggagaaga aagagaaatg 660
atgcagctgg tgcccagagc tctcagggcc agaccagaca gatgggggct gggcccacac 720
```

329

aggcgtgcac cggtagaggc acaggaggcc aaggcaktct caggacargg cagggggcag 780
caggatacct ccagccaggc ctctgtggcc tctgttttcc ttctcccttt cttggccctc 840
ctctgctcct cnccacaccc tgcaggcaaa agaaaanccc ca 882

<210> 462
<211> 733
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (640)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (660)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (677)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (687)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (711)
<223> n equals a,t,g, or c

<400> 462
tccccatggt tctcctacct aaatgattgg ttccctatg gctatttctc caagagttaa 60
gggatagctg cttaactatg cacctttaca gaacattctt agcagtaatg ctcaaattta 120
aaaggcacac tcaagatact tccatgtcat ggatcccttc ccagggtcca gtartataaa 180
tatagggaag aggttagcat gaacttacwa attgttttaa gtaatcctct tgaatgccag 240
tcattaaagg actttgcccct tctacatcaa attacatcct ttccacaaat ccccatttct 300
gtaataactg gtgcaaacct aaagggtgctt tatagtttta ctactttgca gatttgcaat 360
gctgcatata atgcagaaga gcattaaaaa cttttgtaaa aactcatgat ttgataaac 420
ttttaaagta gcgtttatat gtaaataga ctacacatgg gcacacacac ttgcacargg 480
gcttcagaaa aacgtgcaat atagggtgagg aaaaatgtct attgaaactt tctcacaggc 540
tgcccttatt aattaaaact agtggtgggg gcaagcaaca tctgtttcca agtaggttca 600
ggggactagg caaaccttaa agggcggcag gcggcctgen gtttgcttca ttccttaggn 660
ttactgggtt cctacanctg gttttanttg tcttaggtgt ggactttgga nggtacagtg 720
tttgtggctt ttt 733

<210> 463
<211> 574

330

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (18)

<223> n equals a,t,g, or c

<400> 463

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ntctcaatta aacaaaanaa aaaagtggag aactggcagt gacctctact gggggccatg 60
gcagggaggg gagccttctg gaagggctgc cttggagatt ggaatgggga ctcccagggg 120
gacctgcgtt ccattccctgc ctgcctcacc cctgccacag actctgcaca ccactggatg 180
gtgggtccaa gcttggcaca gtccctgtgc ttgtcagagt cattattatg attaatatca 240
attacgatgc caaaaattgc tgggcaaact ttgaagacct caacttgta caatgacgat 300
gatgatgatt cttggcggtt acacaatcct tcctcctggg ggggaggcag ctaggaggcc 360
cagcaggggg gcttctatgc tgctgggctc ccctagggag ttggggtagt ctgtgccaac 420
tccaggcagc tgctgtggcc tcacccctgg gcccccaat tttgggtcat ccattcctcaa 480
atacactatt tttgcttgta tgctgtgtc atttgttggg tgtacagagg ggatataggg 540
agagtggtag gcttcccaca cagaaactag gaca 574
```

<210> 464

<211> 691

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (5)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (7)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (9)

<223> n equals a,t,g, or c

<400> 464

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gtacnngant cccgggtcga cccacgcgtc cgcggaaggt ccttctgaat cccttccctg 60
ttccttaggt tgcactagtc gggggttcca tgctgggggg cagaaggaat gctctctacc 120
gtctgaaacc gttcatcagg aaggccttga tttgtgatgt gctaggagag cacaggatct 180
gcaaatagaa ggcacctgtc tcccttctgc aggccgagga gaggccgcca tggactgtgt 240
gcttcttcat ggcttggtta ctcttcttct acagacccta cagcttgggg cctgggctcc 300
```

331

tctgaccatc ctcattgaga aaggaaagtg agtccagaga agttgatgct tcctacctgt 360
tggagcggcc cagcagtgtg agcgtgggtg ttactgcccc atccgccatg tccttcagtg 420
ccaccattct cttctccctt cccagtggca gcgaggccag atgctgctgc tgcgctgtgta 480
agagtggagc taatggaggc aacacaggct cccaggggtg gaatcctcct cccagcacc 540
ccatcacagt gactggacat ggcttggctg ttcagagctc agagcagctc ctgcatgtta 600
tctaccagcg ggctcgataag gcagtgggtt tggtgaagc tgctctgggt cttgccaggg 660
ccaacaatga gttgttaaaa cgtcttcagg g 691

<210> 465

<211> 260

<212> DNA

<213> Homo sapiens

<400> 465

atgagtcaca tttattgatt tgcattwtgtt gaatcaacct tgcattcctgg ggacaaagcc 60
aactccattg ttgcratga actttttaat rtgctgctgg atttggcttg ccagtatttt 120
attgaggatt tttgcacagt gtttaccaaa gacattggca tgatgtgttg ttgttgttgt 180
tggttgtgtg gtatctatga taggttttgg tatctggatg atgctggcct gataggaatg 240
agtttagagag aacttcctta 260

<210> 466

<211> 851

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (584)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (727)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (755)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (761)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (793)

<223> n equals a,t,g, or c

<220>

332

<221> misc feature
 <222> (825)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (842)
 <223> n equals a,t,g, or c

<400> 466
 gcgttcgcgt ggggtcccgcc cccacactcc gccagaggg gcctcagctt ttccaccact 60
 gctttctagt cctttaactc ctagaggcaa acttttgggg gataagaaag cctgggaggg 120
 gcctgtgcca aaacctctc tgcttgggga ctgggcggtg attccgcttc tgcttgggct 180
 cctgccatgg ccccgagag gggctgacac tttagctccc ggtgcaggtg agaaccgcc 240
 cggaggaaga aggaaggcgc gggccgggga ttaggagacg gaggcggact cggagccagg 300
 gaaccagggg tccgggctag agctggagtc gtgagcgcgc gcccgccccg ctctgggagg 360
 accgcgagat gccctgtctg aagcagctgg gcccgcgca gcccaagaag cggcctgac 420
 gcggcgccct gtccatctcc gcgcgctcg ggcacttccg gcacacgctg cacgtggggc 480
 gcggcgggga cgccttcggg gacacctcgt tctgagccg ccacggcggc gggcgcccc 540
 cgagccccgg gcgcccccg cgggggcccc gkctccccg ccgncgcgc cgtccgcagt 600
 ccgcagcgcc tcgctgcga cccgctgtgc cttcacctgg atctggggcc tcagtctgga 660
 cgcggtgctg gcgtatggac gcggcgcgcc gaagcggtg cgcaagccac gcgaaccgc 720
 ccggacnagc cccagccgtg cgccacgca ctcantacac natggcttag tctatccggc 780
 tccgccgacc atntgtctaa cgcagggggc gaaaaaaaaa aactngggcc gaccatcgct 840
 tnggcatcat t 851

<210> 467
 <211> 503
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (498)
 <223> n equals a,t,g, or c

<400> 467
 ggcgcagacc ccgatcccg ctgcgggtca ctagtgtctc agaccagaat gacagagtgg 60
 ttgagtgccca gctacagacc cataacagca agatggtgac cttccgattt gatctggatg 120
 gggacagccc ggaagagatt gcagctgcca tggatatataa cgagttcatt ctgccttcgg 180
 agcgagatgg atttctcaga cggattcggg agattatcca gcgagtggag accctgttga 240
 agagagacac tggccccatg gaggtgctg aagacaccct aagccccag gaggagccag 300
 caccattacc tgccctgccc gtccccctcc cagacccatc caatgaagag ctccagagca 360
 gcacctccct ggagcacagg agctggacag cttctccac ctccttcatt ctttcttcc 420
 gggaactcct ttgtctcctg ggaaacccat tttcccttg aacccccatt ttccccagg 480
 tcccatkttt ccccatcnat ttt 503

<210> 468
 <211> 1905
 <212> DNA
 <213> Homo sapiens

333

<220>

<221> misc feature

<222> (933)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (940)

<223> n equals a,t,g, or c

<400> 468

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ggcacaggac cagtggagtg agctgttcat ggatgcgcta gggcccttca acttcgtgct 60
ggtgagttcg gtgaggatgc aggggtgtcat cctgctgctg ttgcccaagt actaccacct 120
gcccttcctg cgagacgtgc agaccgactg cacgcgcact ggcctgggcg gctactgggg 180
taacaagggg ggcgtgagcg tgcgcctggc ggccttcggg cacatgctct gcttcctgaa 240
ctgccacttg cctgcgcata tggacaaggc ggagcagcgc aaagacaact tccagaccat 300
cctcagcctc cagcagttcc aagggccggg cgcacagggc atcctggatc atgacctcgt 360
gttctggttc ggggacctga acttcgcgat tgagagctat gacctgcact ttgtcaagtt 420
tgccatcgac agtgaccagc tccatcagct ctgggagaag gaccagctca acatggccaa 480
gaacacctgg cccattctga agggctttca ggagggggcc ctcaacttcg ctcccacctt 540
caagtttgat gtgggtacca acaaatacga taccagtgcc aagaaacgga agccagcttg 600
gacagaccgt atcctatgga aggtcaaggc tccagtgagg ggtcccagcc cctcaggacg 660
gaagagccac cgactccagg tgacgcagca cagctaccgc agccacatgg aatacacagt 720
cagcgaccac aagcctgtgg ytgcctcagtt cctcctgcag tttgcctttc agggacgaca 780
tgccactggg gcggctggag gtgggcagat gagtgggtgc ggcccagca ggcggtggtg 840
aggttaccgc wtggaaacak tkttcgscgg cagytcctgg gactggatcg gcttataccg 900
ggtgggtttc cgccattgca aggactatgt ggnltatgtn tgggccaac atgaagatgt 960
ggatgggaat acataccagg taacattcag tgaggaatca ctgcccagg gccatggara 1020
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ccagatctcg ctgccttctt cggagttggc cagcagcagc acagacagct caggcaccag 1140
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tcctggcaag tccaagcgac accgcagccg cagcccggga ctggccaggt tccttgggct 1260
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ccgcgcctg tcccagagtg ctcctgacag gagcagtaat ggcagcagcc ggggcagtag 1380
tgaagagggg ccctctgggt tgcctggccc ctgggccttc ccaccagctg tgccctgaag 1440
cctgggcctg ttgcccgcct tgcgcctaga gactgtagac cctggtggtg gtggctcctg 1500
gggacctgat cgggaggccc tgggcgccc aaagcctgtct cctagtcccc agggccatcg 1560
ggggctggag gaagggggcc tggggccctg aggggtgggt aggcagatgg gccaaggtga 1620
ccaccattct gcctcaatct tttgcaagcc cacctgcctc tctcctgctg ctcctccagc 1680
tgtatctgca cctgcctctc tgtcctggcc aggggtggac aactggggtc ccccaaaact 1740
cagtcctggc acctcaactg tgacaatcag caaagcccca cccaggcccc catctgggat 1800
gatgggagag ctctggcaga tgtcccaatc ctggaggtca tccattagga attaaattct 1860
ccagcctcaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa 1905
```

<210> 469

<211> 775

<212> DNA

<213> Homo sapiens

<400> 469

334

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ggaagaaagt acactaacac ttctaggagc ctcttctcag aattgtagtt attccaaaat 60
agcaaatagt tggcataaag ggaaggatta tgtcagcaaa acctttttaa aaatccttat 120
ttgattaatg atggtaaaaa ctaaaaaaaa acagagtttt ctattaaaat agcctatggc 180
cttggctaag acagctatcc tagtaagatt atcttatttt ctatttatag acacatccac 240
tyaaactgca tttttatcca gcgttgatct tcacactcac tgttcctatc aactcatggt 300
gccagaggcc attgccattg tttgctcacc aaagcataaa gacactggca tcttcagggt 360
caccaatgct ggcattgctt aggttttctgc ttgtaaaaaa aagggtcttc atccacacac 420
caaggagccc aggtctgttc gtatatgcaa acatgtgttg gtaaaagaca taaaaataat 480
tgtgttggat ctgaggtgat atgttctgaa tgtaagcacc gtcaacatca gacacctact 540
catggacatg tgggtgccgg attttcttaa gatgtttcca gaaatgactg atattttata 600
tttatacatt ttagatgaca aagcttgata tttattgctg ttgcacattt taaagttttc 660
tttttgggtt gctctgtgtc aagagaggtt acatggtgtt aaatcggtag ctgataatgt 720
acccaaatac tatggccaga taataaattg tgctgcaaam aaaaaaaaaa aaaaa 775

```

<210> 470

<211> 1297

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (5)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (26)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (31)

<223> n equals a,t,g, or c

<400> 470

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tccgnaattc ccgggtcgac ccacngtcc naatcaagct ctaagtcttt ggaccctctg 60
tggaaacatt tctaaccoga attttaattt ggecttttca accaaaggct tagagtggta 120
gcaagggatt tcttccaata ggaaacctga tgtttctgat ttaaagagaa ggtgatattt 180
taattgtttg aattaagctc cttgcaaagt tcgggtgtgt ttaccactt agggctttct 240
ttcccagtc aagctaacac attttgtaa atgatccct tccctgctca cattgtgtgt 300
catttctcat catcagtagt cctccagcct gggcagctgt cccaccctt tttcatgtag 360
gtgcaggaag ttaaattctc tttccaggat gcatgtgaac atttacaag ttgaactttg 420
agtgcattct gctcatatga attattggga ttgttgatat atattgtatt atgctaccaa 480
agaaatatgt gttttattag aaggaaatgg tcatcctctg gaccatggag actagctcag 540
aatacgtga tttccctctc ctgactttgc caagcctttg gctgcttttg cctgataaag 600
ggcagggcca tctgaagaca cttccccag tcggcttttg agtcaaggga gctagtgcct 660
gtcacacat ttttcaaaag ggcagtgac tcagaacttc actgtacctg ggatttttaa 720
ttcctcttgc agtgttgacc agcagagaga cttgaggcta ctttaagcct ccactatgtg 780
ttttagata aaattctcca ttcaaacatt ttaaaggact ttgaacatta tctgcttatg 840
gaagttgtgc ctttcaattg gtttagtaacc acctcagcca taatacttac catcataggt 900
ttcttaaaat gctttttttt tttccctaaa cttgagtttc cttagtgatt tcaaaatgaa 960

```

335

```

gtataagaat atcagatcca gttagcaaaa gcctaggact tgtttctcca aacattgtac 1020
taacattcaa cttgttttaa aattatgact caagaatttt aaaaaattat tctggacatg 1080
aattaaaact tttttataat ataagtattt ttctgattga aaaaaggata taattgactt 1140
cactctaatt gtcatgtata ttcccataag taaatggatt ttgaagtatt tttatttttt 1200
gaactttatt taaagcattt gtgatgacat gttcaacttt tgcattgtatg tagcctttga 1260
agtaaaaaata aataggaatg ttaggctcac gttaaaaa 1297

```

<210> 471

<211> 2155

<212> DNA

<213> Homo sapiens

<400> 471

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aatatagtaa tttttaaatt tgtaataaat gaaaaccctt aagcatgcag gatgaggtat 60
ttgggttttt tttttagatc gatcacatct acagaaaatg gctaaaccaa gttaactttt 120
attatagaca gtgaataaaa caccaaaaac ccaaaaatgc tttaaccaca gtataaataa 180
tagattatac acatcatctt aataactatt ttttaagttat ttaccatagc ctctgtatag 240
accttaggaa cagtgtttca gtgatctggc accagtttat tttgttctgc tgaaattctg 300
tatcacaaat gtgctacctg gtttttgtcc attagataat tactctttat aaggaaagga 360
aagagaagca gagttagttc cagctctaatt agggatcttc aaagttattt tgtcttgatg 420
tatgtaacag taattcttta catcttttga tttttctctt cctttttatt cactcttccc 480
acgaatttaa atgtttaagt tatattcatc actagcaagg atgrtaaaca cttgtgcact 540
gaaagctaac agggagaggg tacacaatat ttacagktt cttaaacata atttartgca 600
tcaccttcca cttgctaaca taccaagtca gttattttca agggaagaac cttttaaatt 660
atggctctcc atttactact tccactgaga gtatgctctc attcctcagg tgttttgaga 720
aacatgacta ataaccacac aattaagtag agtcattcca agtcctatgg cctggaaatt 780
gtattcccta taatatacaa attttcctgt aataaagtca acttagaaac tccaaggagg 840
ttacatgttt tccaacatat cctaaaaact gtgatataag ctaacatata atttgcctta 900
cgtcaaaaga atatgttttg ttgcagctga ttccagttta taatagatcc ctagtaaaaa 960
gctttgattc aacacaattg ttcattctca catcccaaac agaatacactg tttcttgaat 1020
atataatttt gaagtttttt tgtgcaatat attactaaat cagttattat tttacttttc 1080
caaattcaga gaaagaaaac agattacctg aattcatgga aaagggtggat cacctccctt 1140
tttccacctt caagcctttc ctgtcctcat agccagcatg acttctttta acttggattc 1200
ctttgtatat agtaaagttt agtatatata tatttttttc tttttgctac tttctgagge 1260
attatgtaaa gggctcatac tagatgttca gttaaatata ctttagcaca aagtcaaact 1320
agagaatgtg ttaaggaggg aatgtatatg tcttggtaga ccaggaggcc tttgccagca 1380
atthaagcaa cagatgtgaa tacttcacaa agctgtaaag accattgtct taaatactac 1440
aacaacttaa cacccttttg tgaagatcac agcatttata taagaaactg tgaggctttc 1500
tggtttacat atatcttaca ggtgtttttt tgtatttttt ttttttttta gtttgaaatg 1560
tgtaagcttt gatttaaacc aagtttactt cagtatgtta atgatgtagt aaaaatattt 1620
attgaaaggt gaattcgagt attttaatgt tatacctgcc attttttttc ttaaagcata 1680
ttctttgcat ctaactgcca gtgccattgt caaaacttat tttttaaatc gttgtacatt 1740
tcttattaaa ctaagtgtct aattttaaag tattatgttg ccatcatata gtgtataaaa 1800
atgtataatt gccaatgtat tgtaactatt atttattttt aaatgaaagt gtaagaatgc 1860
tttctgattc aacaaatttg ttatcaaact gtttccttat cctcttttct gatgtagcat 1920
aaaaattgtc cgggtttgag ttataactgc cagtagatga ccagtcacaa gtgaaccact 1980
tctcagttgc caatctttgc tcatattaaa aacaacttac aaatacttag tttttgtatc 2040
taatctctga ttattaaaa gtttataaag tttattttta ccaagagat gcaattcatt 2100
atgagaaagt attgcataat aaattttgtt ttataacttt aaaacctgtg ccgaa 2155

```

<210> 472

336

<211> 459
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (368)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (416)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (437)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (447)
 <223> n equals a,t,g, or c

<400> 472
 gcggagatgc agctcaaggg gaagaaaggt ggtgcggggc tgcgggaggc acagaggggg 60
 ccggttaactt gtggaggggc ggcctgacaa aggccgggag cggagggacc gtgcgaggag 120
 cagtgattga wctgccgtcc aatcccagct ctgccgctga ctagttttga aacctgtaga 180
 aaggctccgt gtctgcttta attaccggtc cccccaggat tgtttcaaga attcagtagc 240
 tgaggctggg agtgggtggc ttgtaatccc agcgctttgg gaggcctggg cgggaggatc 300
 gcttgagccc gagaccggcc tgggtgacat ggtgagatct cgtctctaga ggaatgcaaa 360
 gggtggcncg ggcgtgggtg cgcacgcctg tgggtccggc tgcttgggag gctggngtgg 420
 gaggattgct tgaccnngga ggtcaanggc tgcactgca 459

<210> 473
 <211> 710
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (65)
 <223> n equals a,t,g, or c

<400> 473
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 tgatncaatc ccaggatgtg agtgggtctg aagatacatt cccaaataaa cgacctaggc 120
 tagaagataa gactgttttt gacaattttt ttatcaagaa agagcaaata aaaagcagtg 180
 gtaatgatcc aaagtatagt acaaccacag ctcaagaattc cagcagttca tccagtcaga 240
 gcaaaatggt taattgcccc gtttgctcaga atgaagttct ggagtctcag attaatgagc 300
 acttgagctg gtgccttgaa ggtgacagca tcaaagtcma aagcgargaa agtctttgaa 360

337

```

aaaggtttca aagtctcaag taccacctgt attatctcac taatgtgcta tgtcagccag 420
tcaggaagtt ctgggtaata ctaagatttg taggttataa tctagttcac ataaccaata 480
gaaagtgtcc tattttatat atacgcataa aagattgtaa ttttaagatg ttttgtgtct 540
cagggtgcta cattcactct tgccttaggt atactgtaac ccaggttctg cctgtcgtgt 600
ataattttta gatacttttg ttctttcttg ctcttaagga ttttaaaaac ctgktaatct 660
ttttatttgt atacttttct aaaaatattc atatggggaa tcctgtcaaa 710

```

<210> 474

<211> 1279

<212> DNA

<213> Homo sapiens

<400> 474

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gcccacgcgt cgcgcgcaag ccaacagggg tgtcgtgcgg tgggagtact tccgcctgcg 60
tcctctgcgg ttcagggccc ctgcactgag gctgcagaag tcccagtcac ctgatctgct 120
ggaaaggagg agggagagtg tcctgcgcgg ggagcaagag gkscagagg agcggagaaa 180
tgctctcttc ccagaggtct tctcccaac gccagatgag aactctgacc agaactccag 240
gagctcctcc caggcatccg gcatcacggg cagttactcg gtgtctgagt ctcccttctt 300
cagccccatc cacctacact caaacgtggc gtggacagtg gaagatycag tggacagtg 360
tcctcccggg cagagaaaga aggagcaatg gtacgctggc atcaaccct cggacgggat 420
caactcagag gtcctggaag ccatacgggt gaccggtcac aagaacgcca tggcagagcg 480
ctgggaatcc cgcactctac ccagtggaga ggatgactga gcctcgggat ggggcgcccc 540
ccccctgccc tgccctgacc ctctgtggaa ctgccaaag catcgccaag ccccccacct 600
aggaaatggg tcctaggtcc aggatccaag aaccacagct catctgcca caatcccacc 660
atgggcacat ttgggactgt tgggtttttc gtttccgttt ctatcttcct ttagaaatgt 720
ttctgccttt ggggtctaaa gcttttgggg atgaaatggg acccctgctg attctttctg 780
cttctaagac tttgccaaat gccctgggtc taagaaagaa agagaccgc tcctccactt 840
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agatcgcagc accttgaggg gctgcgggtc tgaggggagg gacactcagc tcctccctct 960
gagaagtccc aagctgagag gggagacctg cccctttcca accctgggaa accatccagt 1020
ctgaggaggg aggccaaact ccagtgtctg ggggtccctg tgcagccctc aaacccttca 1080
ccttggtgca ccagccaca cctggtggac acaaagctct cacatcgata ggatcccatg 1140
aggatggtcc ccttcacctg ggagaaaagt gaccagttt aggagctgga ggggggtctt 1200
tgtccccac ccccaaaact ccctgaaata aacctggagt gagctgcca aaaaaaaaaa 1260
aaaaaaaaa aaaaaaaaaa 1279

```

<210> 475

<211> 480

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (354)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (371)

<223> n equals a,t,g, or c

338

<220>
<221> misc feature
<222> (470)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (475)
<223> n equals a,t,g, or c

<400> 475
tgactcgag tggagtcagt caacaaccca ggtctcctgg ctcttaagac gtttcctttt 60
taatattata ggaatgggaa tgctggctcc ttttacagta ctgggccctt tacactgtac 120
tgcatactcg ttttttcagt ggatatatga gcttcttgtc aaaattatgt ggggtcccatg 180
aagaaacatc taaccagggg aagggggaag gattgagaca taagacgtac ttatataaga 240
tttcttttaa gaattccaat cttggacatg ttaaattttt ttatattttc tcatgtttaa 300
atctcagttc gtttttcagt ctgtgctcag cacgtaagtg tggggaaatg gacnaagggg 360
gctgcgggaa ngaccgctgg ctgggctcaa catgcctgtg ccttttcccc ttcattgtgt 420
cttgtgtctg atgcattctt aacacagaat gacattttac tgtttttcan aaaanaacct 480

<210> 476
<211> 947
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (3)
<223> n equals a,t,g, or c

<400> 476
ttnggccgag cttgggtcat ggcggcgccg ggcgcgctgc tggatgatgg cgtgagcggc 60
tcggggaaat ccaccgtggg cgccctgctg gcattctgagc tgggatggaa attctatgat 120
gctgatgatt atcaccggga ggaaaatcga aggaagatgg gaaaaggcat accgctcaat 180
gaccaggacc ggattccatg gctctgtaac ttgcatgaca ttttactaag agatgtagcc 240
tcgggacagc gtgtgggtct agcctgttca gccctgaaga aaacgtacag agacatatta 300
acacaaggaa aagatggtgt agctctgaag tgtgaggagt cgggaaagga agcaaagcag 360
gctgagatgc agtcctggt ggtccatctg agcgggtcgt ttgaggatcat ctctggacgc 420
ttactcaaaa gagagggaca ttttatgccc cctgaattat tgcagtccca gtttgagact 480
ctggagcccc cagcagctcc agaaaacttt atccaaataa gtgtgggaca aaatggtttca 540
gagataattg ctacaattat ggaaacccta aaaatgaaat gacaatgatt ttgtatcagt 600
ggtccaaaca gaactaagca taaatcattg tgccatccca aacctcggtc cagccgcctt 660
gcccatacta gattctaaat gtttctaaag gcaaacccta atgtgtcaag acagacttgt 720
ttaggtgtaa ttttaggaat tatgctggtt catcaggaag cagaggggga gttttaaaag 780
tcaagcttaa attgaagttt aaattcatct ataaccaaat caaatgatca gaggaaattc 840
tgtaatcaat gctggaaatc gttacattgt ttagaacatt cttgctcatg cctgtatttg 900
cacaaataaa tgaaacttcg ctgtcaaaaa aaaaaaaaaa aaaaaaa 947

<210> 477
<211> 585
<212> DNA

339

<213> Homo sapiens

<220>

<221> misc feature

<222> (547)

<223> n equals a,t,g, or c

<400> 477

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accaggacca cggggcctgg ctgcgcggcg gggatgtgtg gctggacagc tgccgggtttg 60
ctgacaatgg cattggcctg accctggcca gtggtggaac cttcccgtat gacgacggct 120
ccaagcaaga gataaagaac agcttgtttg ttggcgagag tggcaacgtg gggacggaaa 180
tgatggacaa taggatctgg ggccctggcg gcttggacca tagcgggaagg accctcccta 240
taggccagaa ttttccaatt agaggaattc agttatatga tggcccatc aacatccaaa 300
actgcacttt ccgaaagttt gtggccctgg agggccggca caccagcgcc ctggccttcc 360
gcctgaataa tgctggcgag agctgcccc ataacaacgt gaccggcatt gcctttgagg 420
acgttccgat tacttccaga gtgttcttcg gagarcctgg gccctgggtc aaccagctgg 480
acatggatgg ggataagaca tctgtgttcc atgacgtcga cggctccgtg tccgagtacc 540
ctggctncta cctacgaaga atgacaactg gctgggtccg cacc 585

```

<210> 478

<211> 3470

<212> DNA

<213> Homo sapiens

<400> 478

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aattcggcac gagaaggatc gggggcctcg ccgctctgtc tcattccctc gcgctctctc 60
gggcaacatg gcgggtgtgg aggaggtagc ggctccggg agccacctga atggcgacct 120
ggatccagac gacagggaag aaggagctgc ctctacggct gaggaagcag ccaagaaaaa 180
aagacgaaag aagaagaaga gcaaagggcc ttctgcagca ggggaacagg aacctgataa 240
agaatcagga gcctcagtgg atgaagtagc aagacagttg gaaagatcag cattggaaga 300
taaagaaaaga gatgaagatg atgaagatgg agatggcgat ggagatggag caactggaaa 360
gaagaagaaa aagaagaaga agaagagagg accaaaagtt caaacagacc ctccctcagt 420
tccaatatgt gacctgtatc ctaatggtgt atttcccaa ggacaagaat gcgaataccc 480
acccacacaa gatgggcgaa cagctgcttg gagaactaca agtgaagaaa agaaagcatt 540
agatcaggca agtgaagaga tttggaatga ttttcgagaa gctgcagaag cacatcgaca 600
agttagaaaa tacgtaatga gctggatcaa gcctgggatg acaatgatag aaatctgtga 660
aaagttggaa gactgttcac gcaagttaat aaaagagaat ggattaaatg caggcctggc 720
atctcctact ggatgttctc tcaataattg tgctgcccac tatactccca atgccgtgta 780
cacaacagta ttacagtatg atgacatctg taaaatagac tttggaacac atataagtgg 840
taggattatt gactgtgctt ttactgtcac ttttaatccc aaatatgata cgttattaaa 900
agctgtaaaa gatgtacta acactggaat aaagtgtgct ggaattgatg ttcgtctgtg 960
tgatgttggt gaggccatcc aagaagttat ggagtcctat gaagttgaaa tagatgggaa 1020
gacatatcaa gtgaaaccaa tccgtaatct aaatggacat tcaattgggc aatatagaat 1080
acatgctgga aaaacagtgc cgattgtgaa aggaggggag gcaacaagaa tggaggaagg 1140
agaagtatat gcaattgaaa cctttggtag tacaggaaaa ggtgttggtc atgatgatat 1200
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340

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ataccagaat taatttgcca catgttgtct gttttaacag tggacccatg taatactttt 1620
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<210> 479

<211> 637

<212> DNA

<213> Homo sapiens

<400> 479

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ccactcttcc tttgcaaaaa ctttatgggtg ctttgggtcc ttttaaaccc agtgaacctg 180
gagccaatat gaggcacata aggaaacctg ttataaagcc agttgaaatc tgaatatgtg 240
aacaatcca ggctctcaa ggaaaagact tcaaccaggc ttcttgttac ccacaggtga 300
aaaatgtgag cataatactt ctaatatatt tgataagtaa ggtaaccaca attagtcagc 360
aacagagtac aacagggttt ctattttacc accaactact atacctttca tgacgttgaa 420
tgggacatag aactgtccta catthtatgt aaagtatata tttgaatygc ttatattttc 480
tttttctact ttttatattg gtacattcca gaaatttgta gtaggcaagg tgctataaaa 540
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aaaaaaaaaa aaaaaaaaaa aaaaaaaggg cggccgcg 637

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341

<210> 480
<211> 1889
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (26)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (57)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1295)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1370)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1844)
<223> n equals a,t,g, or c

<400> 480
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tactgatcgc cagaatcgta ctgattgcgc tgggcttcac gggctttttc ttccgccgca 180
cgctgtgagg gcagcttaat accgtaagac gccagttcac gacgagttgg cacgcggata 240
cgtttcggtc gtggcaactg cggaccaatc cctcttttga cctgaggacg cgggccaccg 300
ctatttgcca gactgaagac tggcgcgga acggttgagg cagccccgtc gccagtgctg 360
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ctgcaacaga aggtgctttc agcgaagatt tgatcgggtc tggttcttta accggttctg 480
gaatcgggtg ataccaggcc gcaagttggt cacgttcacg ggctcgcttc tcttcaactt 540
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342

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ttcgtcatca tcccatccgc tttaccggag aacaacgcag cgtctgtttg ccgccccatc 1260
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gcacggcgtg attcatgctg tttgcccggtg attttcatct tcatactctn cgtcgtcttc 1380
atactcatct tcatcgaccc aggtatcacc gcgacgggta cgattactgg cgaagggtgag 1440
aatgtttaaa atccagccgc cgagtttttc agcaatgtca cccatgacca accgggtgaac 1500
aacgtcaggc ccgctgcccc aacgcagagc agcgcaatag ttcccccgct actgtgtagc 1560
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aaagaacagc gtatctgcc accacgcacc gggcatccca cctnaattat ggataggttc 1860
atgccaggcc gtttgcgacc agctgggggt 1889

```

<210> 481

<211> 493

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (453)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (472)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (475)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (491)

<223> n equals a,t,g, or c

<400> 481

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taacgatttg tgttggtgaga ggcgcaactg cgattttctgc tgaacttggg ggcattttcta 60
cgacttttct ctacagctgag gcttttccctc cgaccctgat gctcttcaat tcggtgctcc 120
gccagcccca gctkggcgtc ctgagaaatg gatgggtcttc acaataccct cttcaatccc 180
ttctgactgg ttatcagtg agtggtaatg atgaacacac ttcttatgga gaaacaggag 240
tcccagttcc tccttttgga tgtaccttct cttctgctcc caatatggaa catgtactag 300
cwgttgccaa tgaagaaggc ttttggtcga ttgtataaca cagaatcaca aagtttcaga 360
aagaagtgtc tcaaagaatg gatgggtcac tgggaatgccg tctttggacc tgggcctggg 420
ttcctgggga attaaaattg ttacagcagc agnggtcaaa cagccaattt tnggncgtaa 480
aactgggtgag ncg 493

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<210> 482

<211> 473

343

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (399)

<223> n equals a,t,g, or c

<400> 482

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ggcgggggag agggaccagg gaaggcgctcg gggggaatct cgcgaggggtt ggagtttttg 60
cgagagtttg tggaagatgg cgcctgttgt gacagggaaa tttggtgagc ggccctccacc 120
taaacgactt actaggggaag ctatgcgaaa ttatttataa gagcgagggg atcaaacagt 180
acttattctt catgcaaaag ttgcacagaa gtcatatgga aatgaaaaaa gggtttttttg 240
cccacctcct tgtgtatatc ttatgggcag yggatggaag aaaaaaaaaa aacaaatgga 300
acgcgatggg tgttctgaac aagagtctca accgtgtgca tttattgggr taggaaatag 360
tgaccaagaa atgcagcagc taaacttggg aaggaaagna ctattgcaca gccaaacmtt 420
gtatatatct grctcagcca gcgaagactt tcatgttgtc tgtaaagtgt tct 473
```

<210> 483

<211> 851

<212> DNA

<213> Homo sapiens

<400> 483

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ttatttaatg tgggtttattt tgggctcaga aataattgct ctggtgaaaa taatcctttg 180
tcagaaaaga aggtagctac cacatcattt tgaaaggacc atgagcaact ataagcaaag 240
ccataagaag tgggtttgatc gatataatag gggtagctct tgattttgtt aacattaaga 300
taagggtgact ttttccccct gcttttagga ttaaaatcaa agatacttct atatttttat 360
cactatagat catagttatt atacaatgta gtgagtcctg catgggtact cgatgtgtaa 420
tgaaacctga aataataaga taataagaaa agcaataatt ttctaaagct gtgctgtcgg 480
tgatacagag atgataacta aattataata aaactcttca ttttgtgaat tatagaagct 540
actttttata aagccatatt tttttaggga aactaaggag tgacatagaa ctgatgaatg 600
agyaaaagta agttttgctg gatttttgta gaactctgga cgttgaggat tcattatgct 660
gtgggttaact ttaaatattt ttgaattcca aatatctgaa ttaatgagcc ttgtctttac 720
aaatatgtgc cattgtgcaa catcggtgga ttttctaaaa ataatgtaaa tgtcttctat 780
taaagtgttg gtgcaataaa atacagaaga attctcaaaa aaaaaaaaaa aaaaagatct 840
ttaattaagc g 851
```

<210> 484

<211> 1500

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1430)

<223> n equals a,t,g, or c

<220>

344

<221> misc feature
 <222> (1451)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (1454)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (1457)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (1499)
 <223> n equals a,t,g, or c

<400> 484
 cgcacagccg gccttttctca gcgaaagcct cctgcgaccc cgcgtgagcc caccgatcgcc 60
 accgtctccc gttgaaaata tcttcttctc tcgtatagtg ttagcttgat gctccgtag 120
 atactttcaa tggaaacaga tttgcactcc gtttgacagc catttttcctc caaccactcg 180
 ggaaactcgt agtaagagca ttacatgggc cctggaatac tgattcgcct gataatttgg 240
 aagaagtga gtttttactt catatgtggg tagctctgtt ttacagcaat cagaacaaaa 300
 tcatacgatc ttcccgaag gttgtagaac acagcaaccc agcaaaatat gtgtctataa 360
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 gttctgcaga ctctctgttg gagactaacg aaatttccag ggctcatgct gctgaagtat 480
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 gaccttctgt tcctagtga gaagaaattg ttcagccact ggatagcaca agagtggctt 780
 cttacagtgg cactgttact caagccacat tcaccaggac ttacgatggg cctggcagtc 840
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 gttctagtca tctatcacc agtgaagaar tgagatgcac tcaggatttn ctttyacaga 1440
 ctyagartct nctngncta tctttagaaa ggcttcttag aacttgacac aggttgaant 1500

<210> 485
 <211> 491
 <212> DNA
 <213> Homo sapiens

345

<220>

<221> misc feature

<222> (452)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (453)

<223> n equals a,t,g, or c

<400> 485

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ctcctgcctt ttgccacatc ggccctcgtgc agtgagggct ctgtgggctg gggctgctgc 120
ccctgcctac ctcctgcctg tccccagagg ctgaggakag ggggtactgt gcccaccaca 180
catrattagg cctcagaccc aactctggtc ctggctccac aacagtggct gccactcact 240
ttgtccagaa ggtggcttgg ggggtggatat ctttgggttg ctggaaaagg tgtgggaagg 300
ttcaggatgg tgggagggac tgaggctcct gaggtgaaga ggcccttggc cctgacgggt 360
ttgacccgtg cctggacctt tggagcagtg ttgtgtgaac ttgcctagaa ctctgccttc 420
tccgttgtca ataaagcctc cccctcatga cnnaaaaaaaa aaaaaaaaaa aaaaaaaaaa 480
agtcgtatcg a                                     491

```

<210> 486

<211> 1317

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1310)

<223> n equals a,t,g, or c

<400> 486

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gaggataggg agcctggggg caggagtgtg ggagacacag cgagactctg tctccaaaaa 60
aaaaagtgtt ttttgaaaat gttgaggttg aaatgatggg aaccaacatt ctttggattt 120
agtgggggagc ataatagcaa acacccctt ggctcgcaca tgtacaggaa tgggacccag 180
ttggggcaca gccatggact tccccgccct ggaatgtgtg gtgcaaagtg gggccagggc 240
ccagacccaa gaggagaggg tgggtccgcag acaccccggt atgtcagcat ccccgacct 300
gccttctggc ggcacctccc ggggtgctgtg ttgagtcagc aggcattggg tgagagcctg 360
gtatatgctg ggaacagggg gcaggggcca agcgttcctc ctccagcctt gacttggggc 420
atgcaccccc tctcccccaa acacaaacaa gcacttctcc agtatgggtg caggacaggt 480
gtcccttcag tctctgggtt atgacctcaa gtctacttg ggccctgcag cccagcctgt 540
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atcatcattg ttgctttatc acttctaaga cattttgtac ggcacggaca agttaaacag 660
aatgtgtctt cctccctggg gtctcacacg ctcccacgag aatgccacag gggccgtgcr 720
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cgcgctactg aaacttgctg accactatgc tgagaatcct tcgcaactgta atcgagagcc 1140

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346

gcgatgcctg acagtgcctg atggatgcgc cttagcgtac gggtttgtgt gcggacgaat 1200
 cactaggcct tgtccttttg aagggggctc gggagggggg gtgttccaaa aatggggccaa 1260
 atttggcgct agttaaacac gtttgtgggg aaaagcaaag ggggttatan aagtttc 1317

<210> 487
 <211> 944
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (932)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (942)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (944)
 <223> n equals a,t,g, or c

<400> 487
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 gagagatcag tagcatttga ggaagtaaga gaaaagaatc atggtacctc agggtttctt 180
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 aataaagcaa ttagtgaagc acttctatcc aaaatgactt ttttgtcctt ttttaaaacc 780
 aatttactgt tactggaaac tttttgtaca ataaagcaat cacgcagatt aaagaaaaaa 840
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<210> 488
 <211> 1677
 <212> DNA
 <213> Homo sapiens

<400> 488
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 ggaagacact ccaggcccta ctgagcgggt tgaacaagta ctccacagcg ttcgggcgca 120
 tctggctgtc cgtggtgttc gtcttcggg tgctggtata cgtggtggct gcagagcgcg 180

347

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tgtgggggga tgagcagaag gactttgact gcaacaccaa gcagcccggc tgcaccaacg 240
tctgctacga caactacttc cccatctcca acatccgcct ctgggccctg cagctcatct 300
tcgtcacatg cccctcgctg ctgggtcatcc tgcacgtggc ctaccgtgag gagcgggagc 360
gccggcaccg ccagaaacac ggggaccagt gcgccaagct gtacgacaac gcaggcaasa 420
agcacggagg cctgtggttg acctacctgt tcagcctcat cttcaagctc atcattgagt 480
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agtgtgccaa cgtggccccc tgccccaaca tcgtggactg ctacattgcc cgacctaccg 600
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tctgtgagct ctgctacctc atctgccaca gggtcctgcg aggcctgcac aaggacaagc 720
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acaagctggt ggaggctggg gaggtggatc cagaccagc caataacaag ctgcaggctt 840
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caatgggaca tgcagggcrg tgtggcaggt ggagaggtcc tacaggggct gagtgaaccc 960
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agactttgaa acaagcgaat taactatcta cgctgcctgc aaggggccac ttagggcact 1140
gctagcaggg cttcaaccag gaagggatca acccaggaag ggatgatcag gagaggcttc 1200
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tcagcctcag gcagtgggtgc tcccatcttc cccccacaa ctgtgctcag gctggtgcca 1560
gcctttcaga ccctgtctcc agggacttgg gtggatgcgc tgatagaaca tcctcaagac 1620
agtttccttg aaatcaataa atactgtgtt ttataaaaaa aaaaaaaaaa aaaaaaa 1677

```

<210> 489

<211> 1640

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (680)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (695)

<223> n equals a,t,g, or c

<400> 489

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tttagatctc aggtctaagg cttcctttcc ctccctctcc cagctagttt gtgctaatta 60
agagaccttt tatactgttt tattgcctgt ttgaagaaat aatttttatc acgtttttgt 120
aagatatcta taattttaaa tgtttataaa ttgtttaatt tattagcatc ttaatgtacc 180
ccatttttat atactgaatg tggccttttg agtgaaatag gaagcttcat ggtgttgag 240
ccacctttgt acagttgttt aaagtttccc attgtcacgg aaaacattgg ytgcaaagcc 300
cctcaaagcc ctcaagtgcc ttctgtgagt ttaaatgtgc tggtgccctc cagaaaagcc 360
tcggcctcag ctccgtttcc gcctgttccc tccccagga taatgaatgg ttactgcact 420
gtaaagaccg tgggtctctt tctaataata ggagattcga gtttcccagt ttacatgaat 480
gaagtctgaa ttaagacgg tgatgaaact gaggttcagt actctcggga ctcgaggaaa 540

```

348

```

ttattcctga gacatggagt aattccttaca aatttaaact attgtacaga tccacatata 600
tgttggttaag tacctaattgt ttgtctgaac ttttaaaagt taatttccaa aatgtatagg 660
gattcatgat aattaaaccn tttttattgc tcatnttttt agtagaagaa tatcacttat 720
tttttagactt gtaaaatgta tgractgggtg agcggacatc tgtaagaga gtcactagtc 780
agaatgttaa aggagtgcac gcaggatgcc ccaaagtgcg tgaactcttg ttactcctgt 840
atgtagtagt gtaagcatgt gacttttaac accatttggg ttgaaactaa tgtagagatg 900
cctgattcca aacagggtgtg gagaatattg aacggctcag aagccgcgct ccttacttaa 960
cacaattccg aatctccctc atccatgatg cgtccattgg atcactcgct ggtggtcact 1020
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atgtccacag ggggacctgc ctcccgatg gtcccacctt tcttcaagg tctgtcatat 1260
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awttagatat ttaagtcact tgtccaatga tgtgtatgtc taagcctcat gtaccgattt 1440
gaagtcagac ttaaaaatgt atttacagat tcaactgaga ctttttaatc ggttcttcaa 1500
atatttcatg tttacattaa aaatttccag agaagcataa aagtattcac tttcctgcct 1560
tgtcatttct gaaaagattt tggggagata ttttattgca tattaattaa taaattgttc 1620
tactaggaaa aaaaaaaaaa 1640

```

<210> 490

<211> 637

<212> DNA

<213> Homo sapiens

<400> 490

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atttcggcac agtaccgctg ggaccagcct tatctcagac ctgcttacct gcatgatgcc 60
tttttggggg ctggggattg artcttgcct ctctgccag ccctgttcta ttctgcargg 120
tccctgtgtt ggaattctcc ctggggaacc tactttctgc tcagtgargc tccggccaga 180
aacctggagt ccttatcctc cctctgttaa gtgttttagg gtctggcttt tgcaggcacc 240
ctctgacctc agcagagctc ctgggcctgc tgectgcaca ccacatcgcc tacctacaat 300
gccaaagcct cactgtcacc ctttctgcct tggtttcctt agctgagcca cgctgcccac 360
gcagcagagg gcagaaggct tgcacttggg ccaaagggcc taagggtccac tggacagttg 420
ggaaaacacc tgaccaccat ttaaggactc taagccagaa tggaaaattc accaggactc 480
cattcttaag cctatgctag tcccctagag agaggcattg tactgatata taaatattat 540
ataatatata catgagacat actgacagaa tctgtaagct aataaaatgt aagaaaaggt 600
taaaaaaaga ataggtaaat tgacaagaag taaaaaa 637

```

<210> 491

<211> 464

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (338)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (397)

349

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (438)

<223> n equals a,t,g, or c

<400> 491

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gtatttacaa agagaagggg cpactcgtgt gtgagcagca ccgagggaca gaggtacctt 60
gcctgcttgt gtcccctcca agtccttctg atattttcct ttccagctgt tgcctagtgt 120
cctggattta aggagaatca actctctgga taaacgtggg aaatatggcc catagtccca 180
tctttttaca ggcatttttt acacctggag cagccagagg acgcatgcat ggctcttcgg 240
aaggtaattt agggatcacc catgtaagtt tcctaaggat ttctttaaca tggttcttct 300
gattcagtcc ggccaattaa atctgaaatc caccctnga aagccatctg gtgtggataa 360
caaggcccac aaattgaggc agttcagctt tttgtgncct tttaggcytg ggacaaccac 420
gggatcttaa aggggggngg ggaactagga ggtttttgag ttcc 464
```

<210> 492

<211> 777

<212> DNA

<213> Homo sapiens

<400> 492

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tctgtgtcac tcttgtatgt cctcatatct ttcatactc ttgtgtagtc tctagaagca 60
gaacacctaa gtectgggtc tggataatga aaccctcagt ctctggggcc tctgaaaata 120
aggaagcatt ggagctattg ccatgttgag tartgggctt cctagaacta ttgtcatcta 180
tcttgccagt gttttatggt gtagctgttt ttctttgaca ggtgagttcc agctatgttg 240
ttagtcatga tcttgccatt attttctgtg ttctgtagga tgtctccagg ctacttaaac 300
atattttatg agtttgcaat aaaattgttg aatcttgtat gatcaagtca ctctctgtct 360
cagaaatcca cagtgaactc ttagtaagcc cctacattat atgcatactt gtttttttct 420
taactttact cccacttcta cctaacaggg acctcaactt aagtctcttc agttcttcaa 480
ggcctggcct tgttcttgat tcttcaaaaa atcttgactc taaggcctat tttattgtct 540
gtctctgaat ccctataaag cttcaagtct gtatgacatt cttaacgcca aattatatat 600
tgtcttgtag tgttcttagc tggtagatgt atatttagtct tgtctccctc atgagaatgt 660
aagctcctta agggcagggg ccatgtctta atttttgtat ccaccacagg cctagcacag 720
tgcttggcac atgggtgctg aataaatacc tttgtttatt gatcarmaaa aaaaaaa 777
```

<210> 493

<211> 564

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (510)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (522)

<223> n equals a,t,g, or c

350

<400> 493

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tccaagctcg aattcacctc actaaagggg acaaaagctg gagctccacc gcggtggcgg 60
ccgctctaga actagtggat cccccgggct gcaggaattc ggcacgagat taataaaaca 120
gaggagtaca ttttaccctt gcaattccag tcaatactgt ggtgtcattt cagccaacat 180
accaacattc agtcaaatcc caaagccaaa tggataattt cagatggaat ggagttagac 240
aggaactggc ttccctttct cctgttacta tgaggacaac ccacacctgc tcagtggcct 300
aaaatatttt aaatatgttc atgacaatta tgctgagaat gccaggataa crctgatgga 360
acccatgact tcaccaggat tgtgggtctac atttacaggc ctagtactag aactagaccg 420
gcttagagag tgggagatat ccctctgttg tccatcgaaa agataaaaaat acaggctttc 480
agccggtgtg cagtgggtgca tgcctttggn ccccgctac tnaagggggc tgagaatggg 540
ggaatccttt ttgagcccca gaaa 564

```

<210> 494

<211> 773

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (283)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (734)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (762)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (768)

<223> n equals a,t,g, or c

<400> 494

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ttagagctca atgctttgtc ctctgtcatc cttctactgc atccctttct tcgtttcctc 60
acttcaactt tttagtaaac ttgtctgagg cattagcttt actcttacgc attttgctcc 120
cctgcctttt tgttataaat attatcatgg catgaaacaa aaagcctgtt atctgccttt 180
ccatgatcac tttgtgaca ctgtttcagc cacaagtaaa cctagcaact ctatgaatag 240
caggacagac ttgaatgtgg tgtgtgtgca aggaagtat ttnaactttc ttaactctaa 300
atgccaccag aaaacattct gctccctgtt acttcttttt tttttttttt aaattacttt 360
gttttgcggt aaggagtggg ggaatgtgtg gtggcaggga agtaatgtaa gttgctttat 420
aactcactgt ctaacaaagt tttgaaaatt tgtctgatat gtaattaggt actttagggt 480
tattaggttt tcataaaaaat tctggttagg gctcttgcc tgcaccaatg aaagcctttc 540
cacagggcaa atataaaaga gagagtagag ggaawycccc tgaggtttaa atamgtcaaa 600
ccagtaagta atagtgtctaa gtttgtcagt gcctctcttt cttactgtac ttaacatcta 660
aaggggcacc tcatttattt tcaggcta atgtgtcttt atgggggtgac tgtccaatca 720

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351

ggggaggggt gttnacggtc cagtggggag ataccctttt cntaattnat agc 773

<210> 495
 <211> 723
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (597)
 <223> n equals a,t,g, or c

<400> 495
 gtcctagtga agaggaaggc ctgtgtagca gaaaggcttt gggcctgaga ggtaaggcc 60
 acagctgttg acacctgttt tggctcctgcg accctttact ggtctccgct ggctttgaat 120
 cttcctctgg gctctactct ggagaacata agggctgctg tggttgagtc tggctagcac 180
 tgtctgtggt tggcagtgtg tacacccttc cgttcagttc cttgggggta tttttcagaa 240
 atccaaaggc aacccttcgt gcagtgtcct cttttttaag tacagttgat tacccttgcc 300
 tgctgggggg cctagscatg ggccagagat ggaggagccc cagtggctga caggscagcc 360
 tcactcaggc acgtacctgc tgaccagtca gccactgcca acccatggcc cagccactgt 420
 gtgcattagc agggagggtt gtaggscatg gaggaaatga ggagacacca cctagtggag 480
 acattggggc cctgytgggg ggatggtgtc tatagstggy tctgctggct ccctcaggcc 540
 ctgcttacca agctctggag gaggggagtg ctgcattact gagcaccttc cttgttnttt 600
 cctcatagga cactgatgtt actgtcactt tagttatgct aaagtggagg tttcagcctc 660
 cagaaggaca gcagagcctt ctagggtcac cttagaataa ggtttttagct aggctggggg 720
 ttt 723

<210> 496
 <211> 445
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (366)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (388)
 <223> n equals a,t,g, or c

<400> 496
 ggtctctaaa tgatgaaaaa agaaatcatt ctcagaagga gaaaagattg tatgggtttg 60
 gcctctccat atcttagcca attatgttgc tattttcatg gcttcagtta tcaaaacatt 120
 actgctgggt agcagggctg tagttctcga cagccttcac agtgcacatc tcttgaagtc 180
 acatgagagc tctttggaaa gttgaaatta gaggcattct atatttactg ggkctgaatt 240
 tgkccctgac tactmatgga gtagaaaatg acccattttg cctacattga gtaggctgaa 300
 ggaatttgca wttctccact cttgtgaggg ttacacctaa tttattttaa atagaacaag 360
 ttcttnatgc ttaggggttaa gcctttanaa atggaaaatc tcgatattca tctctctatc 420
 ttgataaaag tcagccaggc cattt 445

352

<210> 497
 <211> 617
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (525)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (603)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (617)
 <223> n equals a,t,g, or c

<400> 497
 gcaggacag cacatgggaa agcccatgg ctttgtgac catctgggga tgtgatccat 60
 ttgggtaagg acttgggttt cagggcatga gttggcttcc ttgcaggatg caggtcctta 120
 ggtgggtggc ctctgtctcc agctgtaggg ccctgccagg aagcctctat atgagcctac 180
 ctccctcctg caggaccaga gaggggttgt tatgaacagc ccaggggatt ggttgacta 240
 agcttgtctt gaagcttttg ctggggagtc caggtgccc tgtctctcac ctgctcccca 300
 tacacatctc tgcacacctg gctgaggcat tcccagacct aacctcagat aatgtgcatg 360
 tgatgaacac tcccaagtgg ctaggcctct tgcacctgag caggtggatt ctgccccagc 420
 actggggctt tctctgggct gtccatcatg ggtatatctc tggattccag gattgctagt 480
 tagcacctca catttgaggg tctgtgctat tcartctara atcanaattg gatgaaaaat 540
 caactttgac accacctttg ggttggtgts attggcttwa cacctgkaat cttaacactt 600
 tangaagctt aagccan 617

<210> 498
 <211> 1189
 <212> DNA
 <213> Homo sapiens

<400> 498
 actactagag aaaaaccaac tggcagtttg ctaagcatat ctactggtgt tgtttctgcg 60
 ccctcttttg gctaattgat gtaattatac tggctctaaa gatttactgc cccataagta 120
 aatagtatag ccacattctg aacatatcaa agtacaaac ttaggaggag tgtatgtaca 180
 aaaatgtaaa attttatgaa aatgaacatg tttttatgat gttatttcta gttcataaga 240
 atgtgatgac tgctttgctt catttatgta cgttcccatt atattcttgc tgtcaatcaa 300
 tcacaaattt atatcagatt aggataaact aagccatttt atgtatttta ttttaaacct 360
 tattttggca gagtaattcc ttagaattgg aaaagctggt actttgaaat taccaattta 420
 ttacaaaaca tagaaatgta ttgkagctac aaagacaacc aagcattttc tgtgttttaa 480
 tgaatatcta aaaaactaca tttagtttat tttactcagt tttgaaatga tttttttact 540
 ggctctattg ccttaaaata actaagagat taatgattct ttgtataatt ttccctttct 600
 ttgttctttt tttaccattt cgcagagtta tatctatagt tttagtaaca atttcttatg 660

353

```

tattctggat aactgaaaac aactaaaggt gttgggcrtt agaaaataat tgtgagcagt 720
aagattactg atgtaatatg tatgttggac tgaagtattt ctttataaac attctatttg 780
attttaagca aaatgtatgt taaagcatgt ttttacatca gtaaagtcac ttgtcgacct 840
tctggaaatg aaaggttttt acctagatac tgtaagttac acctccttaa caatcatatt 900
tgtcattggt gttttctgca aacaaaaatg tttatgggct tcatgtaggc ttaagattgt 960
aggcaaaaat ggactgagtt caggaccctt caagcagtag gcattcagtt acagagcagt 1020
tggtagcttg taaccagac ttacagttaa aaaatatcaa gttagctgat gtttcattat 1080
aataaaaata ctattttgct taagagttgt attacaaata tttgtgctta acattagaaa 1140
tagctgtttt aaattgtagt taacatatta actttttcag aaaaaaaaaa 1189

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<210> 499

<211> 396

<212> DNA

<213> Homo sapiens

<400> 499

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attaaatcaa atgatattga catattatga gggagaagaa gtcaatgctg gaaggattgg 60
gctaacgcta gtagtagctg gaatgggtgg ctctattctt tgtggcttat ggctggatta 120
tactaaaaca tacaacttct tcatgactgg ttacctcctt ttgggttttg aatttgctgt 180
tgaaatcact taccctgaat ctgaaggtag ttcatctggt cttcttaatg cttctgcaca 240
gatatttgga attytgttca cattggctca aggaaagctc acatcakact atggctcctaa 300
ggcaggggaa atttwtctct gtgtctggat gtttatasgc atcatattaa cagcattaat 360
caagtctgat ctgcgagaca caacataaat atagga 396

```

<210> 500

<211> 1309

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (253)

<223> n equals a,t,g, or c

<400> 500

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aaaatgtgcc agttccactt ggtaataacg ttgggaaaat gcaggtttat gaatgatgtg 60
gactttttaga ggatcaaate aataaattgg attttttatt ttttgagggc agctgcmtca 120
ctgtttttaa taaagaatct tacataagaa tgttgacaac attcacagta agccattgsa 180
gaaaattgat ctgcatgtcc tagaccaatg attacaaggt gtctgtgggt ctgtgggtta 240
ggggggccag ccnatcattc cttttccctt tggcactcat gagagagatg ccaagttcag 300
tgtggatttt tcttggtgct ctatggagaa atggagtctg tgtgcttact gaagagtccc 360
aaaaascaga gaccattttc atttaytgcc atcataaata ttctccacca ttcaagatgc 420
ctgtgtacac ggctatttgg gaaactwaag tgttgaggga ggcaggggct gaagggtgtca 480
aaacctctc agtaggataa cccctttctc ccccttggac catctgccat ctttcatgag 540
tgtttcccat ggtgtttttg catccagagt tgacarcaac tcaattttgc cttgaattta 600
ctcagtctta taaattaaaa atgtgcattt tatataaaga tgcattttat ataaaaatgc 660
acacctttta tctctatatg gcagcatata catatatata tataaaatgc acacttttaa 720
tctctatatg gcagcatttt tgaggcttta tatctgcccg tgtacctca actgcctcyt 780
ttttgcagag aacgatcccc acaggaactg gtctaagaac actgtctgca catgattgat 840
gcttaaaatc caatatacca ccacatatca aaggktggga ttttcagagt cttctctgat 900
ttctgagctg aaaccttaac aaatagggaa tttggcaggg aagacacctg ggtttttaat 960

```

354

```

tcagaaccct atttatatac tgttaaaatt tgaggacta tagtttatat aaaagtcgga 1020
tgtaaagata ttatatttca gtactaggag cttctttgca gtcattaaca tgacaaatta 1080
agtaataaat ataaaagtga ttgtccataa attatcattg aattttttgt ttattttgta 1140
gtgttctgta tttatctgca ctttgtgtat atatacacac atacatatgc caacatgtaa 1200
ataacctcat gtttattcct aatctaaatt gccmcaatat ttttaatgta tggttacact 1260
gtgttttaaa ttacttttaa aataaacttt gtaagcagaa aaaaaaaaaa 1309

```

<210> 501

<211> 944

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (10)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (11)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (16)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (17)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (882)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (892)

<223> n equals a,t,g, or c

<400> 501

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aattcggcan nagggnncaa agcagttaga gttcagaggc cagcggctca gggccactcc 60
ctccctagcc ttcacagca gagcaccctc catcccccctg cattgctctt ctgtgaaagc 120
aaatactaaa ggatgccatc ctctggaatc ctaatggcag gcaaagggag agaggaaggg 180
tgacggcttc tggcacttag aaaacaaaaa gaacaaaaaa agagaaaccc ccaagcctgg 240
aacgcagaga ggtctttact gctgggatcc acggaaaaca tgtctgtcct agccaagatc 300
atatgaagag tttggcacgg aggctgagaa tgacctggca tagatggttt gccagttagg 360
atgtctcaat ttgagccttt gcttttgggtg gataactcag ctcccctctt gtaacctgga 420
aagttggttg cctttatcat cctgctgggtt ttatccatgg actgaacacc caacagcagt 480

```

355

```

gcactatgst ttctatggca tctttcattc tcattttata ttgtgctata aaaaggattg 540
tttctccata tatatatatt atatgtgtat atataataa tatatatgtr tatatatatt 600
atatatatat attatatata taatatatat ataaaatata tatatatatg ctctcctctt 660
tcagcctctt tgtcacaggg aaraagtgtg ggargttgcc ttgggcctgc ctctctccta 720
acctcctctt cccactggg taccctcagc ccctatatatt taattcttga tcatgtarga 780
aattgttttt gggtaaagtgt tgatattatt gttattatca ttattaatta aataaagggg 840
aaaagggaat ttttgtttta aatgaggaaa tgtttaacca gnttctgttc tnttttggat 900
tgtggacttg gcaccttttg ttccaaggta tttcctttgg ggcc 944

```

<210> 502

<211> 664

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (106)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (148)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (628)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (631)

<223> n equals a,t,g, or c

<400> 502

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ggcagaggtc agtagggatt taagataggg agaaaatgta gctcaggga aatgtgtgca 60
gtacaaaaga ccataaatt tttcagaaag cagcttggcc ctgtgnaagt tgaccagatt 120
gaaagtccca gaatcctggg ttccagtnca ctcatgaatg gcttttggtt aattcttctt 180
gtgcttcaat tcttctctt gtgtgaaatg ggtaacacct tatctgcctc cctgagatgt 240
catggaaata agcaaaatta ggtcttaaaa ctacttggaa acctaaattg tgaaaattat 300
ctttatctct gttgtttctt agttaccagt ttaccagaag taacttaaca ctaggattct 360
ctgcyagtac taaaattaga ctctaccact ctgggctttc cttttctccc tcttgctttt 420
gttttcgggg cgtggaggag acatctgtgc tgctggagtt aataataaac taaagactaa 480
agaataactt ctcccactag aaaatactat tttcactcta cccacctgat caggctttaa 540
aagaaggagc ccaaatctgc catggatttt gattatttga ttcactttkg gaaatgtgcc 600
tgaraaarcc tagggaatga gagaagtngg nataaatggg aatcttaaat ggtatagaaa 660
ccaa 664

```

<210> 503

<211> 602

<212> DNA

356

<213> Homo sapiens

<400> 503

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ggtttttcgg ggggtggccc aagccagcct cgctctcggk gggggccatg gtgaggctgg 60
agcctgagga ccaagtgtgg gtgcagggtg gtgtgggtga ctacattggc atctatgcca 120
gcatcaagac agacagcacc ttctccggat ttctggtgta ctccgactgg cacagctccc 180
cagtctttgc ttagtgccca ctgcaaagtg agctcatgct ctactccta gaaggagggg 240
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agggaggtgg ggtagagcac tctccgtcct gctgctggca aggaatggga acagtggctg 360
tctgcgatca ggtctggcag catggggcag tggctggatt tctgccaag accagaggag 420
tgtgtgtgct tggcaagtgt aagtcacca gttgtctctg tccaggagcc cacggtgggg 480
tgctctcttc ctggctcctc gcttctctgg atcctcccca cccctcctg ctctggggc 540
cgccctttt ctgagagatc actcaataaa cctaagaacc ctcaaaaaaa aaaaaaaag 600
gg 602
```

<210> 504

<211> 547

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (475)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (523)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (541)

<223> n equals a,t,g, or c

<400> 504

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tcatgactga aaaggagctt tggaaatcac tgcataaggc ttgatttatt tgcacaactt 60
tcttttaggt tgcagctaga acaaacctgt gcgctttgaa atgttacctt ctgctctctg 120
ttcccaagta cagagaaata atgttgcaaa tctcacttct gctgaacatt atgcttcctg 180
atgcatttag cagacactaa acatttgtca tactctaaac aaagttacaa aggactagaa 240
gaattcttgt tctgtattta gaaaccact cacattactt gatatttggg tatttaagtc 300
atgaaaggta tttcttctag gaagcagtga ttctaaagtg tatgcttaac cagtcagttg 360
agtgtctact cttgtgtgtt cacaagtgtg ccaargtttt kggtaaatta agaataattat 420
ttcaaataaa ttaattcatc cccataggag ccagtttaca gataatccgt tctcntttct 480
ggcaatcata cacaatgaac tcatttccga ataaatataa tanttttctt tatttccacc 540
ntggtcc 547
```

<210> 505

<211> 2083

<212> DNA

<213> Homo sapiens

357

<400> 505

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cgtccgattt actattctta aattataggc agctgtttgg ggaagaagat gctgatcaag 60
aagtatctcc tgacagagct gaccctgaag ctgcctggga accaacggaa gccgaagcca 120
gagctagagc atctaataaa gatggtgaca ttaaactgat ttctactaag gaatgggcta 180
aatcaactgg atatatgcca gttaaacttt ttaccaagct ttttaaagat gacatcaggt 240
atctgttgac aatggacaaa ctatggcgga aaaggaaacc tccagttccg ttggactggg 300
ctgaagtaca aagtcaagga gaagaaacga atgcatcaga tcaacagaat gaacccaggt 360
taggcctgaa agaccagcag gttctagatg taaagagcta tgcacgtctt ttttcaaaga 420
gcatcgagac tttgagagtt catttagcag aaaaggggga tggagctgag ctcatatggg 480
ataaggatga cccatctgca atggattttg tcacctctgc tgcaaaccctc aggatgcata 540
ttttcagtat gaatatgaag agtagatttg atatcaaata aatggcaggg aacattatct 600
ctgctattgc tactactaat gcagtaattg ctgggttgat agtattggaa ggattgaaga 660
ttttatcagg aaaaatagac cagtgcagaa caattttttt gaataaacia ccaaacccaa 720
gaaagaagct tcttgtgcct tgtgactggg atcctcccaa cccaattgtt tatgtatgtg 780
ccagcaagcc agaggtgact gtgcggctga atgtccataa agtgactgtt ctcaccttac 840
aagacaagat agtgaaagaa aaatttgcta tggtagcacc agatgtccaa attgaagatg 900
ggaaaggaac aatcctaata tcttccgaag agggagagac ggaagctaata aatcacaaga 960
agttgtcaga atttggaatt agaaatggca gccggcttca agcagatgac ttcctccagg 1020
actatacttt attgatcaac atccttcata gtgaagacct aggaaggagc gttgaatttg 1080
aagttgttgg tgatgccccg gaaaaagtgg ggcccaaaca agctgaagat gctgccaaaa 1140
gcataaccaa tggcagtgat gatggagctc agccctccac ctccacagct caagagcaag 1200
atgacgttct catagttgat tcggatgaag aagattcttc aaataatgcc gacgtcagtg 1260
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cacgtataga acagaaggaa gagcttgatg atgtcatagc attagattga acagaaatgc 1380
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gcattcattt tgctagaact gttagacaca ttgcagtatg ctgtattgaa agtaggaata 1560
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aatgcatggt gcctttttta tgtaaatacc cttaggtatc attaatagtt tcaaaatatt 1680
gtggtttagt aaagttgata cctgggtata aatattatgc ctttattttt ggctagaaga 1740
agaattattt ttagcctaga tctaaccatt ttcatactct taactgattg aaacagattc 1800
aaagaagtat cgagtgttat gcattgaaac ttgtttttta atgttagatg gcactatgta 1860
tattaatgta aaacaatgtt aatttactca agttttcagt ttgtaccgcc tggatgtgtt 1920
gtgtaagaag ccaattttttg tgtattgtta cagtttcagg ttattttatat tcgatgtttt 1980
gtaaaactca aataacgact atacttatgg accaaataaa tggcatctgc attcttgtta 2040
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaa 2083

```

<210> 506

<211> 1234

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (118)

<223> n equals a,t,g, or c

<400> 506

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agcctccctc tccccatgg aacttacaat caagaagcat cttccaattt catgtacact 60
aaacctaggt ggccacaagc ttcatttggg ccatgaactc ctttgaaacc ctcataanaa 120

```

358

```

ctgtcctact atctccctgg taaatcgcac atacacagag ttttgccttt caggacatat 180
ggccttataa gatttttgact actagtgacc aaaatgttga tgtttttcaa aaattacaca 240
gaattgttaa gatggaatag ttttattcag caaacaaaaa acttgctaata tcagagtatc 300
ctctagtcca cgtaatgtgg tttagactac atttgcaaaa ttagggcctt gacgctgaac 360
aaaataaaaat ccagaggaag aactacagta tccaatcaaa aaggaagtac tagcaaata 420
accagaataa aagactttat tgtattccat acattcacag gtcacttcca gatttagtaa 480
caacactgca atgctatgat gctgtgcggt cathtagctt aaaccacagt gtaagttggg 540
agctctctcc tgctctcttg gcctctagat gtatcacaat acaattccta actgtggcct 600
ggcaaccaat gcttattttca ttggattatt ttctgactgg gacatgagtt catcgcatct 660
tcccagaatt ttaaagtacc ttcccttaca ttataagaga tgaccaaaca ctctagtgtg 720
arggctgctt cacacactgt tcttatctat catgattgct cttccttaca tacacgtccc 780
gtacagatca gctacacacg gcatggtcct gaaaccacag cttttgtttc tttggccaga 840
atgcacccct cacttgagt gccgcctta gaaacacagg tacttggttc tcacaggggtg 900
tgcatgggtg acacaagttc atctgcccc cggtaaaagc tcttcaaaac ctttgcata 960
cttgtgggga gcaggggtcac aatttgttgc atgtgacctg cctcagcctc aaaagataag 1020
agatcatgag gctccaccgc ccccggtc aggaaacttg atccacatcg ctagggtctc 1080
gcctgttagg ttatggatgc tcacctgact ctctgaagca gagggaggct gacacagatt 1140
agctttttatt gaaattatta aagtgcaact ttgtgttttc actctatcag gcactgaaaa 1200
gcaagaagct ttttaatttt tcttttctat aatg 1234

```

<210> 507

<211> 646

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (619)

<223> n equals a,t,g, or c

<400> 507

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gatacaggcg tgagccactg tgccsggcct tcttctttca agttatatag aatggagcat 60
gggggtggca gtggctaggg acatttcctg gggacactct cccctaacc cccagaagga 120
cttcacaaaa acctgtggat aatggaagg atgttacggg acaaacgtat atttatgtgt 180
gtgtgtgtgt atgtgtgtgc gcgcgcgcgt gtgcacatag gcgtgatgtc tgtgaccctc 240
ctctcctcgt cacatttccc ccagaatgaa tgctgtcctg tctgctcatg tttgtgttga 300
agetgccaaa gtcgggggagc tctggtcctg cccagacccc tttggaattg ctggcccatc 360
ctcccactgg agagctggggg tgcagctcac cttggggaag gaaacctcat gcctcagagt 420
aatttcttgt gaatgcaaa cctgggggag cgggtctttg gggggcaagg agccagtcag 480
gggcttgttt cccctcatag agctccccag acgtgcctcc gcaatgcctg aaaccacagc 540
ctaggctaata aaacggttca atttctgtta aaaaaaaaaa aaaaaaaact cgaggggggc 600
cgtacccawt sgccctttng tgggtggttt taaaattcat tggggc 646

```

<210> 508

<211> 2257

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (838)

359

<223> n equals a,t,g, or c

<400> 508

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ggatgattag gctgtgtgtg cgkgtgagaa tgatcacatg tggcgtcatg ctttgtacag 60
agcctcagac cactgggcct ygtccagtga gagtcctctc tggcgacatc acacgcggag 120
agccaggggc caccttagat ctcagatctc tcagagcaat acttttctga actgccactg 180
tgcctgggtg gttggggttg gtgtcatgct tctgactaga gtagatcgcg catgtccacc 240
agtgatacgt tgagtcctta cagttcccc catggagtcc cataagcagc tccatcgaga 300
tctgtcagca agttgcagga cccacaatg ttctgacatg ttaagacccc cttacatgac 360
gagtagagag gcagctgagg ccacaaccgt gtcttctctc tgaatggagc taactcggaa 420
cccccgttt tctcttctt tctgcccacc actgaacatt gcctttttaga taactcagt 480
tttcttctag atgtcatagc aatagacttt cactttcatg aagtttgggt acgatttggg 540
ttctcgctta agtacakata tttatcaata tttttataag gcaaagttca yttaaaaaat 600
ctttccaagt agcagtgtgc ctaagatggc aaaatactaa aaactgggtg ttcctgctcc 660
tgttgtgtgt cacttttcaa gccgattgaa atattttctgg styttagggc attacttttt 720
aactatctcc tttaaaaacg atgttctgta ggttttagtgt ctttgttcat ttccaaaaga 780
gtccagacaa ctgtgtctgc ccctgcagag gctgtttgtc caaaggcagc atgccgcntt 840
ccaccggaac gcagacagca ggggagcggg attctaaagc agcgacttaa aatgaggaat 900
cccccaattgc actaaatggt ttcaggattg actaatcatt gtcttaacat taactcagat 960
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tccccttctg ttttccctca ttacttttga cctccttaag acttcagaga gaatgtccgt 1140
caagttcttt tctccatcaa gttctttaag ttccttgaaa ggaagggact gtgcaaacac 1200
aaagcaatat tcttttgtat ctgcaaatgc gtcmtgtggc ataccaattg gtatcaaata 1260
gaataaaatc aaatataaat gtttgagtct taggttaaaa aggaagggtta tttgtatagt 1320
ttatagataa tgaaggaaaa atttcttttt cattgcagga aatcttgttt actggaagat 1380
agagtcactc ttttcatata agacaaatag tgctttaatg ccaacttctt tttatctcaa 1440
catttcagga tcatgctagg cacactgcc ccttgaatag acattatatg cacagttgca 1500
agtcagccaa tgtttttatt cagaagtatt tccccccatt atagtgcctg cctatcagag 1560
atacaaaaag catccaacac actaccgtaa taggcttctt tggggatgag aaatttgagt 1620
ctcaacaact cagagtttga gatgtcagct tttttggtaa acgtaggtgt tagaggtata 1680
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cacttgattt ttgtgtatag gaaatggcag cttccgattt ctagttggat ttgtcttgca 1920
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ggggtgtcta gttcagcttt tatgttgatc catcctgact tatttttagac attgaattta 2040
tctcaccaca agtaaaagaa catgtgtatt gactgtcttt gctaagtttc ctaatttttc 2100
ctaattatgg caattatgga tgtgaataag aatactgatg ctgtacaaat atttttgtgg 2160
aaatgtacct tgtaatgtg actattttaa taatatgaaa ataagaatac tcttgaagaa 2220
aaaattaaaa tatttactct ttggaaaaaa aaaaaaa 2257

```

<210> 509

<211> 701

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (9)

<223> n equals a,t,g, or c

360

<220>
 <221> misc feature
 <222> (34)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (600)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (637)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (647)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (676)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (691)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (700)
 <223> n equals a,t,g, or c

<400> 509
 ccccaaagng ggcccgcctg aaagggccct aggnagtaca cctcctagga accctaagcc 60
 agagagagggc ttactacat catgcttcct gacatctctc ccctttgaag agcagtcaga 120
 ctcttgcttt gctcttcaga cttaatttg gggtttaaca ggtgaggttg ctgggggaac 180
 tcttttacia catctctctg aaakaatccg ggctgccagt ttcatttggt ttgggtgtca 240
 gtagcatgat ggaaagacaa aaaaacacaa cttgacatct gcagaaatgg gttcaaattt 300
 tacctgcaac tcaccaattc tgtggccttg gttcagcaat taaactccct aaaattcagt 360
 tttttctttg taaaatgggg ttatgaacag tacctacttc aaaatgtgtt tgtgaagatt 420
 aaaaaagtta acataaagag ttaraagag tgtctggcaa aaaaaaaaaa aaaaaaaaaa 480
 aaaggggcgg ccgctctaga ggatccaagc ttacgtacgc gtgcatgcga cgtcatagct 540
 cttctatagt gtcacctaaa ttcaattcac tgcccgctcg tttacaacgt cgtgactggn 600
 aaaaccctgg cgttacccaa ctttaatcgc cttgcancac atccccnttt cgccagctgg 660
 cgttaattag ctgaanaggc cccgcaccgg ntcggccttn c 701

<210> 510

361

<211> 345
 <212> DNA
 <213> Homo sapiens

<400> 510
 cagagtgcaga cactgtctta aaaaaaatta aaaattgtaa aaaaatgaaa aaaaaagttt 60
 tgagcattat ttgcatcatt gggatacata tgtcacttca caagatgttc aatttgaagg 120
 aaataccact cattctctat gtcctgttgt ctgtagtggt cttcagtttt tcatattgag 180
 ttgacctaaa tcctggattc atgacaagaa aggagtaagt actactattc attgttctat 240
 ttgtttataa tctgtattat aaaattgcac ataattaaaa gctttccctt gtcttcaaaa 300
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaa 345

<210> 511
 <211> 967
 <212> DNA
 <213> Homo sapiens

<400> 511
 gacctgtcac tgccctccgc cgccctcctgc ccgcgccatg acccakycgg tgccccggct 60
 ctccgtgccc gccgcgctgg ccctgggctc agccgcactg ggccgccgct tcgccactgg 120
 cctcttccctg gggaggcggg gccccccatg gcgaggccgg cgagagcagt gcctgcttcc 180
 ccccgaggac arccgcctgt ggcagtatct tctgagccgc tccatgcggg agcaccgggc 240
 gctgcgaagc ctgaggctgc tgaccctgga gcagccgcag ggggattcta tgatgacctg 300
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 cctgggcacc ttcacgggct actccgccct ggccctggcc ctggcgctgc ccgcggacgg 420
 gcgctgggtg acctgcgagg tggacgcgca gcccccgag ctgggacggc ccctgtggag 480
 gcaggccgag gcggagcaca agatcgacct ccggctgaag cccgccttgg agaccctgga 540
 cgagctgctg gcggcgggag aggcggcac cttcgacgtg gccgtggtgg atgcggacaa 600
 ggagaactgc tccgcctact acgagcgctg cctgcagctg ctgcgaccg gaggcacct 660
 cgccgtcctc agagtcctgt ggcgcgggaa ggtgctgcaa cctccgaaag gggacgtggc 720
 ggccgagtgt gtgcgaaacc taaacgaacg catccggcgg gacgtcaggg tctacatcag 780
 cctcctgccc ctgggcgatg gactcacctt ggccctcaag atctagggct ggccccctag 840
 gagtgggctc gagggagggt tgccctgggaa ccccgaggaat tgaccctgag ttttaaatc 900
 gaaaataaag tggggstggg acacacgaaa aaaaaaaaaa aaaaaaaaaa aaaaaagtc 960
 gtatcga 967

<210> 512
 <211> 532
 <212> DNA
 <213> Homo sapiens

<400> 512
 tactatcggg aaagctggta cgccctgcagg taccgggtccg gaattcccg gtcgaccac 60
 gcgtccggct cccgggtcca ggcgagttcg cagctgcgcg ccgggtcctg gaggccgagg 120
 ccgtcccgcc ccgttgctcc cgcagtcctc gacgggagcg ccatggccca gccgcgccc 180
 gacgtggagg gggacgactg tctccccgcg taccgccacc tcttctgccc ggacctgctg 240
 cgggacaaaag tggccttcat cacaggaggc ggctctggga ttgggttccg gattgctgag 300
 attttcatgc ggcacggctg ccatacgggtg attgccagta ggagcctgcc gcgagtgtctg 360
 acggccgcca ggaagctggc tggggccacc ggccggcgct gcctccctct ctctatggac 420
 gtccgarcgc ccccgactgt catggccgcc gtggaccagg ctctgaagga gtttggcaga 480
 atcgacattc tcattaactg tgcggccggg aacttcctgt gcccgcgtgg cg 532

362

<210> 513
<211> 515
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (20)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (49)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (464)
<223> n equals a,t,g, or c

<400> 513
gcaaacagtt cttccattan tgaagcgaga ggaaaagcca taataattnc atcttcaccc 60
actacccttc cagagctttg cttctcctcc acatttagcc attaaattgc atgaggattt 120
ctcttcacatc gggctcgcac ggaatctttc ttatatatta ccttttccta catgtagcct 180
tgaatgtcct ttccacaaat atgctccac ggctgggagc attttctttt cttttcgtca 240
cctttgattt ttgggattag attaataggg gaaaaagtcc ctggctttaa agaaaacaaa 300
agtagaattc ttcaaaaata aatttcatac tgggaacaga aaggaaactaa atgcttcata 360
aaacagggaa aaagaaatta agatcatcct agaaataaac taagatwaaa ataagtatac 420
tgacccttgg ttggtagata aaaagatgac cagtcttgta ttgntttaaa attagataaa 480
catggrttaa gcatgcaaag actctgkccc ttttt 515

<210> 514
<211> 495
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (467)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (495)
<223> n equals a,t,g, or c

<400> 514
tctaaccatcc tccctttgct gtyctgaaaa cttcacgtca gagtcatatt taaatgtgta 60
attactgctc tttctcctgc ttataattca ttatactttt tgaatttgag gcttggtgtt 120
ttatgaacct tgaaaagccc tctgctgccg gcctctggag ccaccgtctc cctgccctgc 180

363

```

tctctcctct gccgagggtgc ctgttaagct gcattctctc ctccacagct ccccgcttcc 240
tgcaggcttc ctgtctcact ttctttctgt gctccagagt ctaggcaatc tctkttgtta 300
gaacttccaa ttcaccaata ctttcttatg ttgygtctaa taagctacat catctgtctc 360
ctgggttttt tatttcagtg attatagttt tcatttccag atattccata tgccttaaaa 420
acatctgcat gatactccat ggttttaact cccctgatga atactgngca tttaaccatc 480
ccagcacgtg aggggn 495

```

<210> 515

<211> 446

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (35)

<223> n equals a,t,g, or c

<400> 515

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gttcccactt gcacttaaag ktcacatttg gtgccaggct gtattgcttc ytctcactgg 120
tgagtggcag ctgtgtctcc tttctgccag tccagcagtc ccagctgtca gtggcacctg 180
cataatgaca cgtctgcatt tcccccaat crgcrtgcag cggttttggg aggaggaatg 240
cgactgcatg gcgcgctcgc tgcaacctca gtctgcagcc tgctagggac gcacggccac 300
actcctgtct ttcagcctca gtctgcagcc tgctagggac gcacggccac actcctgtct 360
ttcagcctca gtctgcagcc tgctagggac gcacggccac actcctgtct ttcagcctca 420
gtctgtagcc tgctagggat gcacgg 446

```

<210> 516

<211> 1175

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (639)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (699)

<223> n equals a,t,g, or c

<400> 516

```

aattcggcac gaggtttctc tagaagtaat ttatgttatc aggttatccc ctgagttttt 60
tcttactcac catatgtctg gtggttctca cagccagggg cactgagggg ctctgccttg 120
ggatctggag gccagcactg ttcacctgat ctccaccact gagatacctc tggctagagc 180
cataatcagg tggcccaaag gactgaacaa ggaagaatgg gagggcactc tagactaatt 240
aaggttgtct tttcagttct aagttaacaa tgacacacat gaattttcat atcagtataa 300
ttagatgcgg gtcccatcta attacagtgg gtcattatgg ctgttcgggtt agagcagctt 360
gggtgctctg tgaccatggc atgtgcccgt gtcaggacta gacaaagtca tttgcttggg 420
gaagctctct ccccttcagg tgtgaggcca ggagcacctg gtgtgggtcc tgtccctgag 480

```

364

```

gttctgtcct acaccaccct catgcaacac ctactacaca caggtgcaca gcgactgtca 540
caggcgcttc atgtttaagg atgggcctcc gtgtcataaa cttttttaa gggatatatag 600
rgatagctta tgraatccaa atcaaaggtc cagagtttnc agcaaattgt acctacctat 660
ttgccaaact amctcaccat agaaagccaa aagattcanc ctgtggccag tctttcacat 720
tacagagttt aaagtacttt ttttaaatty ctattttatt ttaacaaaa tatttaacaa 780
aatatagtat atctcatgtg ccagggtacta tttgtaatat ttataaacac tgatttaytt 840
aatcttcaca gagactcatt ttacagattg gaaaacagag gcagagagaa gttaagtaac 900
tttaatgtca ctcagctggg tagtatcaaa gtcttggctg ctggctccag agtctagacc 960
tttaaccact gtgttatgct ttccatgggt aaagcaacct aaaaaggccc ctggaatcag 1020
ttacatgtgg ttggagacta actctgtcat tgacttacta aatgcttgat attgggcaat 1080
ttatctaacc tctctctgca tttagtaagt caatgacaga gttagtctcc aaccactgtg 1140
ttatgctttc catgggtaaa gcaacctaaa aaggc 1175

```

<210> 517

<211> 473

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (338)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (344)

<223> n equals a,t,g, or c

<400> 517

```

ctaacatttt tttccttttt tttcccccaa aggatataat gtattatcta tcaaccactc 60
tctcagaata acttgtttgt tttatcatgt actgtgatag gttagtcatg aatttgcagt 120
taatgaaggg ctatttatct catgcctacc ctcacagggt ttctttcttt tttctttttt 180
gtgacggagc tcaactcttt accaggctgg agtgacagtgg cacgatctca gctcactgca 240
atctccacct ccccagttca agtgattctc ctgcctcagc ctcttgagta gctgggactg 300
caagtatgaa ccacatgac tggctaattg tggttttntt tttngtttgt ttgtttgttt 360
gtttgttttt ttggcagcag gtcggtgggt gggcagtggt ttagagaca gggctctaca 420
ttgtgccag gctagtctca aactcctgat gtgaagcaat cctctccgct cag 473

```

<210> 518

<211> 1508

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (929)

<223> n equals a,t,g, or c

<400> 518

```

catcgaccgg gagctgagcc ctgagggccc aggcaaggag aaggagctgc ctggacagac 60
cctgcactgg gggcccaggg ccacagaagc cgcaggctcg ggtctgcagc ccctgaagct 120

```

365

```

ggactaccgc gccctggccg ccgtgcccag cgctggcagc gtgcagaggg taccgtctgg 180
agcagctgga gggaagatgg ctgaatctcc ctgctcccct agtggccagc agccgccctc 240
cccgcttct ccggatgagc tgcccgccaa tgtgaagcag gcctacaggg cyttcgcggc 300
cgtgcccact tctcaccgc ctgaggatgc ccctgcccag cccccacgc ctgggcctgc 360
agcctccccg gagcagctgt ccttcgggga gcggcagaag tactttgagc tggaggtgcg 420
cgtgccccag gccgagggcc cccctaagcg cgtgtccctg gtgggtgctg acgacctgcg 480
gaagatgcag gaggaggaag ccagaaaact acagcagaag agagcgcaga tgctrcggga 540
ggcggcagag gctggggccg aagcgaggct cggcctggac ggggagacgc tgggcgagga 600
ggaacaggag gatgagcagc caccctgggc cagcccagac cccacctcaa ggcagagccc 660
ggcgtcccc ccgcccctgg gaggtggcgc cccggtgctg acggccaaag ctgaacggcg 720
ccaccaggag cggtgcgcg tgcaagtcc ggagccaccg gcacccgagc gtgccctgtc 780
ccctgccgag ctccggggcc tggaggccga gaagcgtgcg ctgtggaggg cagccaggat 840
gaagtcattg gaacaggacg ctctccgagc acagatggtc ctcagcaggt cccaggaagg 900
ccggggyacg cggggggccc tggagcgant ggccgaggcc ccttcccctg cgcccccccc 960
gtcggccacc cctgtggaag acctcgggcc ccagaccagc acctccccgg gacgcctgtc 1020
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ggaggatgga gaagtggctc tgggtcttct gggcaggccc tcaccggcg ctgtggggccc 1140
tgaagatgtg gcaactgtgca gcagccgccg ccccgtaagg cctggggccc gtggcctggg 1200
ccctgtgccc tcctagagga gcaggcacct cccccagact tggggtgggg gccctgccag 1260
ctccagcacc acccttgccc caagtctttt aacctgggtg ttagcatttt aaagagaccc 1320
cacaggagtt ctggcctgtg actaactaac tgccccaccc cagccgagac ctcggcgaga 1380
ctgtaactag tgatgtttgt acaaccaaag actctatttt gtggtttaag gagaataaag 1440
ttgactacat tttaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaagaaaa 1500
aaaaaaaaa 1508

```

<210> 519

<211> 592

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (14)

<223> n equals a,t,g, or c

<400> 519

```

cctcactaag ggancaaaaag ctggagctcc accgcggtgg cggccgctct agaactagtg 60
gatcccccg gctgcaggaa ttcggcacga gtatgtttgt ttcggttgaa atttttcctt 120
aagtgtctgg tgatccctgg atttctgtc ataattaagg aaaagaatgc tgactactg 180
gacccaggca gggcttctct cccagattgc aggtttgcct cggggataca cgggtttccc 240
aaatgctaga atgaaaagag attttatttt ggcttgctaa catcaaagat actagtttct 300
ccagatgggt tattcagaac actgttgtct tatttttatt tgtctgagat taaatgtctt 360
cccctttaat taaagggagg tctctgatga agtaggtttg ggaactgcta ccttggtgac 420
agcttgagtc tttccttttag tgaagtgcag cacaattcca cgtgcacggt gaccttctct 480
tgattaggg gccttggaat gtacagaacc taacttgaat atacagcact ggtttcttgg 540
taagragtgt acagtgatct aaacttgcaa accaaaatac agagatgatg gg 592

```

<210> 520

<211> 568

<212> DNA

<213> Homo sapiens

366

<400> 520

```
gctgcagcct cacagactcg ctgagtcgct cctgcagaaa ggggggggaga gagatcgaaa 60
agcaggggag ggggacggca cgcccgttta cctgtctgcc tctcattcg ctctcccccc 120
tcgttctgct cactcctggt gtcagcctat ccgccttccc aaacctccc attcccccg 180
tgtagcccc cccttcactt tccttctcgt cctctgtgtt tctcctctct tctttcttcc 240
cttccccctc tagcattgct accttctctc ctacacgcac gcaggcatat aaacgtaggt 300
ttttgatgct cctctgcctg ttgacccgc tattttcatg tttccaacag gttttcttc 360
ccccagtccc tcagctgctg ctgctgctca ggaggtcaga tctgccactg atggtaatac 420
cagcaccact ccggcccacc tctgccaaga aggagaaagt taaacagcag cagcagtagc 480
agcagtaaca gtagtaacga gagagaagac tttgmttcca cctcttctc ctsttccact 540
cctcctttac aacccagggg ttcggcat 568
```

<210> 521

<211> 987

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (25)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (28)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (61)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (162)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (934)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (968)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (974)

367

<223> n equals a,t,g, or c

<400> 521

```
tcttcactaa gggatcaaag ctgngcnc ccgcgggtgc gaccgctcta gaactagtgg 60
ntcccccggg ctgcaggaat tgggcacgag tttttttttt ctttgtgaat tgaatgtacg 120
atacaaatgg taggccttca tgtgagccag ttactacatg antcttcatt tcccacagtg 180
gtttgttcat tcatcagcgt taggcttggg cctggctcca cctttctcct ctccgggcac 240
tgacccacc tttccgtgta tttactgtag gctattaaat atgatcatga cccgccttgc 300
attttcattc atcacctgtt tatgccc aaa tttaaaggaa gtttgtctca ttttgccaga 360
aaaaaattgt aatagtcggc acgctggatt tgtagggcc a gcaaaattgc ggcagtgaaa 420
ctagtttcac ttctaaagcc cttcatttcc cacaaggtta agctctcgaa accccatttg 480
atccttgggt cctatttcga tctctctttg gaatctgaaa atcggctctc atgttgatg 540
cagattagaa gttgccttgt ttgttactct tccaacacag ggtatcaggg agaaagaggc 600
cttatctgtt cctccatccc cctgttttg acagactgct aagaattcct caggacttcc 660
tttggttggg gattttactt tcccaaaagt ctgatctgat ttctttcagg ggtagacaag 720
cttgctctag tgstctggt cagggtcttat cagaaggaaa cccagggaat aggaaaaggt 780
aggatgcctt gacttttgtc cctgttggg gggacttaaa gtgttttttg ccagaattgt 840
tcaaaagctc cggtttcaaa ctctgtagga gttttcatgg ggaaaaacaa aacaaaacaa 900
aaaagggtgc ttattcgtcc ccggagatgt tgnagtaag gttcttccag cacggctttg 960
gggttttncc caantgggga agccaag 987
```

<210> 522

<211> 1155

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (8)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (10)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (13)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (23)

<223> n equals a,t,g, or c

<400> 522

```
tagtgtcntn tgntggaacc ggnctcacta tagggaaagc tggtagcct gcagggtaccg 60
gtccggaatt cccgggtcga cccacgcgtc cgcccacgcg tccgcccacg cgtccgccc 120
cgcgctccgca acaatatcct tatttttaggt gccactagca gatgtaagcg tatacttagt 180
tgccgttaga tgtgacagaa tgagataatt tatgtaaagc agtagagtac ctggcacaaa 240
```


368

```

gcaaacaata aatattattg ttattgttgt tataattgta aaatgaatga cttcaaaaac 300
atagtcccag tttggaggga ttttgtgatg cagaatatct aagtcataga aatagaagac 360
aggtggaata agtatatggt cagagttttt agatgtgttg agtagagacg gkaataatgg 420
aagcattaaa tacaaatgaa aatcacacca gatatccctg raattcaagc aaagaaagtt 480
catcatgtat tcttgggcag caagagaaaag gactagggtt atggcaatgt gtggaaaagt 540
tgaggccttc taagggttga gatctgttg tagccctggw tcacatgggg tcagcaccag 600
gcagtgscty tgaaagcgga garaggctct ggacttccct tgkgkataac agttcctagt 660
gtccaacaat gaggaaygg tgaagcatgg ttacaaaact gtgacaaaaa tatttacatc 720
tagcactgtt accactcaca tgccaaacat tggctgcaca cgtgcagctt atttgtaatt 780
aacatcaaaa gactagatct gaagccttcc ataaatgaga ggccattcat atggcattcc 840
tggaacaaaa cactgcacag gtaccagcct ctccactcct gaccgggttg gtgctgaaca 900
gtcagggatt gttcttgaac tagacttctg atgcttcttg caatcttctt tcatctttcc 960
ctgaaataca caaataaac aaatacaata acaaatagta attaaatgac tttcaggata 1020
acatctagtt gttcagactt cacccttcac aggtgtgtgt gtatgtgtgt ttatgtytgt 1080
atattgaagc aatttgaatt tatttactgt atattttctg agtaaaagac tgaaatgaac 1140
tacttggttc agaaa 1155

```

<210> 523

<211> 529

<212> DNA

<213> Homo sapiens

<400> 523

```

agttctgctt tttcgtcttc taccagtctg attaatctgt aggtttaaca cttccttttt 60
ctttctcctt ggaatgcctc ttgggatatg cattagtgg tcttatgtct tttcttggtc 120
taggtggtgt gtgtgttttg cttgtttggg gcacttttag aggtccagc tgcacatttc 180
cactcctctc tgtgtgttcc tctctgcac tgctgttgt gtgtgtacac ttttttctg 240
agcaatcttt ctcttagcc acattgagtt ctttaacagt tttctgttt tcttcttcat 300
taagataatt aataatcata ctactcacat atcatgtttt agaacttctt aagcctttcc 360
ctttccacc ttttggacct ctaactgaa tttcaaagtc tctttcctt agattaaaaa 420
aataaatcca aagataaaag aatgtaatgt cttataagtc gtatcagtg atattttctc 480
tggtattgtt gttagtgtta taataaatcc taagtgcac aaaaaaaaa 529

```

<210> 524

<211> 1981

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (57)

<223> n equals a,t,g, or c

<400> 524

```

catgtttgac catggttaata tcttttacta cctggaccat tttaaatttc taaatgngaa 60
aggtatatat attmctgtaa ctgtagaggg aaaagggaaa gtatttgggt ctaaaaaatg 120
ttagccttcc tcgtaaaagt agcacaagcc cacttatgaa tcaactgagaa aaagtgaaaa 180
acttgagttg gcaaagatgc agagcagcag tgcagatggc aatgaactct ctgaattctc 240
ttttacctta tttagaagaa tgcagagtaa agggaccttc ttggttctgc aggaacttct 300
caagggatga ggagacagaa cccctacttc caagtgtct atttgtatta ccagatgac 360
tgaagcttaa gagaaggcag ggaagtatac aagcagagcc agttctggta caaacaaaga 420

```

369

```

atttgacagg gacaatggaa ggggtcttctt caccactcct taccttctat gtgatggaaa 480
gactagagct tataaaagta cttccatttt tttattctcc tgaataccaa aggcaattaa 540
agtcagctac aaatgacttg ccagtgctat gttttatttt tgttatagat ttttaaatta 600
tttcttcaa gatcagttct tatcccatat aatgcttagc ttccaagaat attctttact 660
ttcttctgtc ttttacagct ctttgcaatt tgtagacctt aatactcagg ttaaattatt 720
attgcattta taagatcttc tgcaaaaagc ccagaaatgg tccttttcag gtgcctcttc 780
aaagagctga caccttacct tgtgcctttg gcaaartgtg cagaatagat acatcagttg 840
gtgcataatc gaaaaaata ggaattttga acactgttct tccttctaca tttatttctc 900
ttcattttag aatcacactt tttatgttaa accagattat tattattatt attattcaac 960
cagtattaag ttgttaaaac caagggaatg gggccctaac caaaaagaag tctcaactca 1020
gaaaaataag tccccagtc ggtggttctt actttcttgt ggggtgcaca ttttgtatct 1080
ctctaacatc agcgtattcc tgactttaag caggtgttta tatgtaaaat aaaacctggg 1140
tatcgaaggg aaatgcattc tttttatgga gtattgacct tgatcctcta tgatgtcata 1200
tagagcaact cagggctata cttgctagat tttaccaag cagtttgaaa tattaatcat 1260
catcctctca tcttctccas tctccattgc caaagtcttt gtcaaaactc caaatttgtt 1320
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ttttgaatga gtgcattgag aaatgagaga atgtgtgaac gaacatttat gaagtatcta 1440
acatgtgcca agcattgtgc ctggcacttt caatcattag aatgttttat gtgattccac 1500
agcattttct gtatragagt agctcacaa acatttaaat tttccaatat gaatcgtgtt 1560
acaaaattct taattttata tttcatataa attaaagagg aaaaagaaaa ggttttataat 1620
atattttaaa acaatgtgtt actrtataat acaactataa ttgtagttaa taactaaaac 1680
ctcttgaaaa tgtcaaagaa atacttgatt tctgatgcaa ctttgactaa aatatttact 1740
ttagaaataa aaacgttctt attttgctat atcactttta ttgcataatt aaaaagcagt 1800
gttttataga aatgctgggt attttatatt caaaaagatt ttgtcacata attcatgggt 1860
aaaacttgca gttgtaaatt gtgtctgtc ttggtatggg cctattaata gtcccatgct 1920
gttaaatata aagaaaaata tactaaaata ttcaaagttc caaaaaaaa aaaaaaaa 1980
a

```

<210> 525

<211> 1570

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1533)

<223> n equals a,t,g, or c

<400> 525

```

gcccacgcgt cgggcctcct gagtagctgg gactataggt gcccgcacc actcccggcc 60
aatatttgta ttttttggtg agacggggtt ttgccatgtt ggccaggctg gtctcaaact 120
actgggctca agtgatccac cctcctcagc ctcccaaagt gctgagatta caggcatgag 180
tcaactgcgtc cagcccaacc ctctcttttg atgtgaaagt atcacctttt gtacatttag 240
tccataccca atatctcttt gcctccttta gtgcaaagtt actcatcctt acttgtatct 300
aagagaatct ttcctacttt ctgagtgggc actagttttg gagtatatat attgtatgcc 360
atgaactata tttttctgct tatggctttg cctcatttaa ttgccatagc acttacatgg 420
ggcagggtatt cattttctct cttagcaaat aaggaaactg aatttcagag atgtcaggta 480
acctgcctac ttcacacact aggagttttg atgtttaatt ttgaactaag atctatctgg 540
cttgaaagct ctttgcatca aacaaccttg aacaatatac ttggaacgta ggtgtgtttt 600
tggcacagaa catggcatgt gtgtgagggg ttgaacacag acttgcccag attcaaactt 660
accaatcttc tgtttcatgt gccagaaga aacagcctgt ttctcagcct caaacccaaa 720

```

370

```

cttctagttg tcttgattgg ttcagcctga ctgtccaact ctgatttata gctgtgattg 780
ggggagctga gattacacag tgtaggcagg cagaagggcc ccaggcctat tgatatgggt 840
gaggacaata ctcaogcact cccttcactt actcactctt ccaaggtctt ggcttgaacc 900
caattttttt tgagagaata aaccaggctt tttgttctcc acttggcctg actccatttc 960
tggcattcca gccatgtatt tagctgttat cagctttcag atttagasaa agccttgttt 1020
ccaataagct tgtttctctg aagtaattgt taaaatataa ttttcagaaa aagggttaaat 1080
catgactcat acaaatataa aaatgaacat gtgctaaaga tttttatttc actcatgtga 1140
tatgaagtaa ccagacagaa gttataacca gtacatatgg aaagtcaaaa agcacaaaatt 1200
catatgtagt aaaggaattg gattgcaa atgaaggcaaaa ctgttttttyc tacagggtgg 1260
agggaagata atcaaaatgc tagaaccaga atttscatgc ctgtcactta gcttcaattt 1320
acaaaagccc agaataactc aaaggcaa atctagccctg caaatatcag ccctaaagct 1380
gtgctgtggc cagtgcatag ttttctattg aagtacaatt ttttcccaa atacattatc 1440
tctcagaggg agtccaaatt gcttcccttt cactcagcag atctgttcag tcaacagatg 1500
ttaaatagct acagcgtatc aggcacaa atantcttta taaaataaag taacaaacta 1560
tatgttggtt 1570

```

<210> 526

<211> 1084

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (35)

<223> n equals a,t,g, or c

<400> 526

```

caatttctag taggaagaga ataattacat ttgcnggggg ggggtggataa aaacatgtct 60
gcttctcatt taaataagag agaaatgatg ccgtttttta aatgtgaagc agactataat 120
tctcagctct cttttcttct tagccttaaa ttaatattct ctttcttcta gttttggaaa 180
gtgtagtggg aatattcaga caaaagaggc cattttccat ttttaaagct tcttactggg 240
gaaacagccc agttgtagta ggtgccagtc agtcaaggca ggggcctctc tccgtcaata 300
tggaaaactc agcagttttc ctctcccca gttgtgttct tgtaacgttg ttaatgggtt 360
cctttgcttt ttgctttctc cttttctgaa aatgtatgtg ttttgctct cttttggcta 420
catcttcaaa atatttcttt tgtgcctatg tacatgtgta aacatgccat agcatgtgtg 480
gtaggtgtcc tgtattttgt ttgggaaaaa aactatcaaa atgaggaaga gaatttcccc 540
tatttatgca ctagggttct gtgcttttct tttgagttct ctggagtaga tattaatttg 600
ataccttcat ggtaatgaaa ttatgatgga gctgtgttat aaattcctta tgtcagaggc 660
cagtgcggta gcctttgtcc cttcatgcct ttcaattctg agtgggagga aaagcaaaaca 720
tcaaaacagt gcttcagcca aattccatat gtaatgccat tgggagagta ttgactaaaa 780
tatcattcgt cagggaaata tagttgtaat atttttacag gatattccta ggtaaatgaa 840
ggagccttca gttgtaaatt tcaattaccc caaaatgtat ttgctacatt ttgttggttg 900
aagtattacc tcttaacctt ctttgtaaat ttttttcatt ttgtcttata tagtccagtt 960
ttccaagata agctcagtc tttttcaaat gtcmcctttt taccaatact ttttcattaa 1020
attatgaaaa ctgctaaaaa aaaaaaaaaa acaaaaacca agtacctgcc cgggcgggacg 1080
ctcg 1084

```

<210> 527

<211> 1506

<212> DNA

<213> Homo sapiens

371

<220>

<221> misc feature

<222> (1491)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1502)

<223> n equals a,t,g, or c

<400> 527

```
tatagaaggt agcctgcagg taccggttcc gaattcccgg gtcgaccac gcgtccgact 60
aaaggcagca agggattgta aactaatctt acatagtcaa tgtttcatag aatgctttgg 120
ttacaatcag gttttttaa gactttaaag gttttttgta tgctataata tatgcttatg 180
atttctaaaa attatgcagt atacacaaag ggcataaagt caaaaagtgt gtctccctct 240
gtgactttat tctcatacc cagagggtata taatttcttg tattcttggt tagtctttaa 300
gaaatgttat cgtttatttt atatatggct ctctctctgt atgcctcttc ctgttcttat 360
tttaaagtgt caagtttggt acttggttct tgtttaactt ggttggtctt ccatattgcc 420
accttcacgc tctaacatta atgtctccag gattccatta tatggatgtc cctttggaga 480
acatttgttt atagactttt ctactaaaaa tattgttata atgataatat ccttatgcat 540
atatgaagat tactcttgat tctgcctgac tggaaacttt attaataaag tagacattat 600
tctattttga ggctcaccag ctgtgtaggt atgatcttgt gcttccattt aagaaattct 660
tccattttaa gaagaaaaaa aatctctcta attgactatc tgaagatata tgaaaaagcc 720
tatgctttta aattaaactg ttaagacagt ccattgaaag attgtggaag ttcacatcta 780
ttttgcacct taattttttc attgtcccta ctcatgactc taaaaagtgc atggcctggg 840
gctatacttt gttttgcagt ttgttggtat cgtgcctttc cttatctaca ttagcttaga 900
ctatacctta tttttaagaa gagaaagtgg aaattaactg tggcaaaacc tattttggca 960
caaccacatt tggtcattat acaaaattag ctctctatgc ttagaaaaaa atgtgagtta 1020
ttactctgaa agttgtgatt ctgattcctc atgggttggg gctcagaaat ttcttaacat 1080
gtctttgctg ttagtcaagc acaggatttg ttttctgcaa aagtttattt tcaatgaaga 1140
atacttgctc taatagctca taaaaagtac ctttgcaatt taaatcctag gaatagggaa 1200
caaggaaact tactgggaag ttcaaaagaa agaataacag gaccttctag tcagcagggc 1260
atgtttggaa aatgttaata cgccatgatt tttgaagacc aattttagtt caggaggtgg 1320
ttttaaatat tggatgaaaa cttacaggct gttttcaata ttcatttctg aaatacttta 1380
gtatgataga taaatttggt taagttcttg ttcattgtga aatactgttg gaagaatttt 1440
tttcaaaata aagacttctg aatttgtgta ccaaaaaaaa aaaaaaaacc ncgggggggg 1500
gncccg 1506
```

<210> 528

<211> 321

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (231)

<223> n equals a,t,g, or c

<220>

<221> misc feature

372

<222> (315)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (320)

<223> n equals a,t,g, or c

<400> 528

```
ctgcactaca cagtggttgg tacctattag caaactgcgc tgctctaacc tgccacctat 60
ccctttgccc caacacaact acggttgcca ccgtgcccac aacaattcca actgtaacac 120
tggttaattgc gtactctgcc acaaatagcc cttgcgggag caccagcatg ctgggcctgc 180
ttgcgttgcc gtctatgtcc acatataagg cggcgagcgc ctacacaaca nctcttttaa 240
ccttcacggtt ggtgggtaca ttaacttgg ccacgtacg cttactcagc agcaacagac 300
ttacctgcaa caacntccan t 321
```

<210> 529

<211> 814

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (171)

<223> n equals a,t,g, or c

<400> 529

```
gtgggattgc aggcacccac catcatgccc tgctaaattt tgtacttttg tagagatgga 60
gtttcaccat gttggtcagg ctggtcctga actgctgacc tcaggtgatc tgcccacctt 120
ggcctcccaa agtgctggga ttacaggtgt gagccaccat gcctggactc nttgttggtg 180
ttgtttttta ttagtgagga gctacaagaa cacatttata aaaattaaga ggaaacagcc 240
ccactgcatt tgagaagggt accatttcct tcgaagttcc tgctgttgcc ccttcctggt 300
gggggagaca ctgtcctgtt tcagtcattc cgttgctttg ctttatagtt ttattaatgt 360
gtttgtgttg gctttgcatg ttttcaaata tatgaatgaa atcatgcaga gtttattcct 420
ttacagtttg ctttttact tgattatgtt cctgagatgt atccggatta ttgtgtgtag 480
ctgtatggca ttccttttcc ctgctgccta gtgatccatt gaaaatacaa taattgattt 540
ttctatgttg ttccactggt catTTTTctg ccctgtgccc ctttggaat catctcctaa 600
actctagtct cggcccttgc tcttccatgt aaccttgaga atcagcttgt caaatccccc 660
ccaaaaaccc cttgagatgt agaatgkaac ccagctgaat ctatagrtca gtctggataa 720
aatcagcacc tgtgtaaaat tgaattttcc cattcatgag cagggtttat ttctgcactc 780
aatgttttca ataaagttgt gtaccttttc ccat 814
```

<210> 530

<211> 326

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (254)

<223> n equals a,t,g, or c

373

<220>

<221> misc feature

<222> (273)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (289)

<223> n equals a,t,g, or c

<400> 530

```
ggactgagct cggcgccctct agtgtagatg ggtttttaat tttcccagct gaacgtcggt 60
atttgattg tgatttcttt ggtgwttcaa tggactgtag atgaaggagg acctgttttc 120
tctcaggagt gtctgtgggg tctcttggtc tggtttgctc agtgaagtgt ggccccaagg 180
gctgagggag gtggccagga ccccgagggg tggcccccac cacagaggct gctgtcctac 240
gggttcttct ccantttctg ggaccttgcc gangagcctc tgggagggng aaatggccac 300
aggcctggag aatcgacacc cgggtgg                                     326
```

<210> 531

<211> 564

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (470)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (501)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (521)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (564)

<223> n equals a,t,g, or c

<400> 531

```
gggcctggtg ggcccgtgctc tgggtgtgcag ggctggtgcc ttgggtgcag atggcaagca 60
gaaaggggtg gataaagaat tctttcttct cttcactgtg ttggatgaga acaagagctg 120
gtacagcaat gccaatcaag cagctgctat gttggatttc cgactgcttt cagaggatat 180
tgagggcttc caagactcca atcggtatgca tgccattaat ggggttctgt tctctaacct 240
gcccaggctg gacatgtgca aggggtgacac agtggcctgg cacctgctcg gcctgggcac 300
agagactgat gtgcatggag tcatgttcca gggcaacact gtgcagcttc agggcatgag 360
```

374

gaaggggtgca gctatgctct ttcctcatac ctttgtcatg gccatcatgc agcctgacaa 420
 ccttgggaca tttgagattt attgccaggc aggcaagcca tcgagaacan ggatgaaggc 480
 aatctataat ggctccaatg ncctgggcac caagccacc ntggcaacgc ttccaacttg 540
 caagaatcta ctatttcatg gcan 564

<210> 532

<211> 616

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (149)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (613)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (616)

<223> n equals a,t,g, or c

<400> 532

gttcaggaa ccagcaaaca agaggctgct cccgcaggag gcagtgtgaa tggagaaaga 60
 aggctgcagt aggggctgct gctggactcg gtggggagca ggtgcaagga gctctggctc 120
 ccccatggac ctgagctgga gagcagagng cagctccagc ccattcctca ttcttccagg 180
 gcacagtctt caggatgttt cggggagaat aggagccaga acctgagccc ctaagccatt 240
 cccctcacca atgatggggg cccagtgag tcattctgctg gccggcttct gtgtgtgggt 300
 cgtcttgggc tgggtagggg gctcagtccc aacctgggcc ctgctgagca ggagcagaac 360
 cattacctgg ccagctgtt tggcctgtac ggcgagaatg ggacgctgac tgcagggggc 420
 ttggcgcggc ttctccacag cctggggcta ggccgagttc aggggcttcg cctgggacag 480
 catgggcctc tgactggacg ggctgcatcc ccagctgcag acaattccac acacaggcca 540
 cagaaccctg agctgagtggt ggatgtctgg gcagggatgc ctctgggttc ctcagggtgg 600
 ggtgacctgg aanaan 616

<210> 533

<211> 649

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (644)

<223> n equals a,t,g, or c

<400> 533

ggccagcatg gatcctgaca gtgatcaacc tctgaacagc ctgatgtca aaccctgcg 60
 caaaccctg atcccatca tcatagcact actgagcctg gcgagtatca tcattgtgg 120

375

```

tgtcctcadc aaggtgattc tggataaata ctacttcctc tgcgggcagc ctctccactt 180
catcccaggg aagcagctgt gtgacggaga gctggactgt cccttggggg aggacgagga 240
gcactgtgtc aagagcttcc ccgaagggcc tgyagtggca gtccgsctct ccaaggaccg 300
atccacactg caggtgctgg actcggccac agggaactgg ttctctgcct gtttcgacaa 360
cttcacagaa gctctcgctg agacagcctg taggcagatg ggctacagca gcaaaccac 420
tttcagagct gtggagattg gccagacca ggatctggat gttgttgaaa tcacagaaaa 480
cagccaggag ctctgcctgc ggaactcaag tgggccctgt ctctcaggct ccctggtctc 540
cctgcactgt ctgctctgtg ggaagagcct gaagaccccc cgtgtggtgk ktggggagga 600
ggcytctgtg gattcttggc cttggcargt cagcatccag tacnacaaa 649

```

<210> 534

<211> 723

<212> DNA

<213> Homo sapiens

<400> 534

```

tcctctaaca cattcagact acaagtccag acccaggaga gcaaggccca gaaagagctg 60
gaaaggcagc tcatcatgca gagtgaaatg agggaaagac aaatggccat gcagattgctg 120
tgggtctcggg aattcctcaa atatttttga actttttttg gccttgcagc catctcttta 180
acagctggag cgattaaaaa aaagaagcca gccttcctgg tcccgattgt tccattaagc 240
tttatcctca cctaccagta tgacttgggc tatggaaccc ttttagaaag aatgaaaggt 300
gaagctgagg acatactgga aacagaaaag agtaaatgac agctgccaag aggaatgac 360
acttttgaaa gcattgaaaa agccagaaag gaacagagta gattcttcat agacaaatga 420
aatcatgctt accaatcaaa tctcaaagca cagaattatt gacttgaatc atggttttta 480
cagtttttta aatgctcaag attttgatat tatagatttt attttaaaat attaaaatgc 540
aagatagttt tgagctattt taaaataaaa ttataacat tcaacacaaa atcatggagg 600
tgctctaaat aacttttaga ttctctctct ctgtgtgcat taccaatatc taagtgtaaa 660
attaataaat tgttttgaat tcctggaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 720
aaa 723

```

<210> 535

<211> 796

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (742)

<223> n equals a,t,g, or c

<400> 535

```

gattggaagg cgtgttttcg gctggactga aatcctgtga ggaagattcg cgccctcccc 60
gccccctgcc ctccctggga atcctctgaa gatgcggccc cctgtccttc gtgaaccggy 120
agccccggcc tcggccccgg ccagcccct tccgggggcc gaccggggt gggacttcggy 180
gggtcctagc ctgagcccg cgcgggagaa caggcccgcc cgctgtgggg aggggcccgy 240
cgctatcctc gccggggggc ctgggaggcg aacacgtgcc cgccgcccc gacctgcgcy 300
aacttcgtcg cgccartctt ccggcaaagg gtctcttttt tttagtttag gtaaaataaa 360
atctcccaga gaaaacaaag ccgggaagg agccccctt ctgtgaaacg catgccatct 420
tctccatttg tcagtttgat gctgtaacgt acatgggggt ttgcaagagc ttcaaaactg 480
tctgcagacg tcaatttcgc cctccccct gtgagaactc gctacgtarc cagcaactgt 540
gtagtgtctac aaatgatgaa aacgatcaga aatgcgatta ggtgtcgggg aaaaaagggt 600

```


376

```

ttccccgtgkt tttaacttgk atttttactt taattgttac aatcttgata ttcttaacgt 660
gactttttttg ggaaaccacc aagtgccttt taagcaagga gttactggta tttatgccct 720
taatattcct tcattatagg cntattgaat acgttaatat ctcagtaagt gtatttgaat 780
tataattgac tggctt                                     796

```

```

<210> 536
<211> 1135
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc feature
<222> (12)
<223> n equals a,t,g, or c

```

```

<220>
<221> misc feature
<222> (15)
<223> n equals a,t,g, or c

```

```

<220>
<221> misc feature
<222> (1107)
<223> n equals a,t,g, or c

```

```

<220>
<221> misc feature
<222> (1123)
<223> n equals a,t,g, or c

```

```

<220>
<221> misc feature
<222> (1129)
<223> n equals a,t,g, or c

```

```

<400> 536
cggacggtgg gncgncgaca caatgggcca yggagtcccc gttcgatgtg gacgcgctgt 60
tcccggagcg gatcacggtg ctggaccagc acctgaggcc cccagcccg cgaaccggaa 120
ccacaacgcc ggcccgtgtt gatctacagc agcaaattat gaccattata gatgaactgg 180
gcaaggcttc tgccaaggcc cagaatcttt ccgctcctat cactagtgc tcaaggatgc 240
agagtaaccg ccatgttggt tatattctca aagacagttc agcccgaccg gctggaaaag 300
gagccattat tggtttcac aaagttggat acaagaagct ctttgtactg gatgatcgtg 360
aggctcataa tgaggtagaa ccactttgca tcctggactt ttacatccat gagtctgtgc 420
aacgccatgg ccatgggcca gaactcttcc agtatatgtt gcagaaggag cgagtggaaac 480
cgcaccaact ggcaattgac cgaccctcac agaagctgct gaaattcctg aataagcact 540
acaatctgga gaccacagtc ccacaggtga acaactttgt gatctttgaa ggcttctttg 600
cccatcaaca tcggccccct gtcctctctc tgaggggcaac tcgacactct cgtgctgctg 660
cagtcgatcc cacgcccgtg gtcctcagca ggaagctgcc acccaagaga gcagagggag 720
acatyaagcc atactcctct agtgaccgrk aatttctgaa ggtagctgtg gagcctcctt 780
ggccccataa caggggcccc cgccgcgcca cacctccagc ccaccaccc ccccgctcca 840
gcagcctggg aaactcacca gaacgaggtc ccctccgccc ctttgtgcca gagcaggagc 900

```

377

tgctgcgttc cttgcgcctc tgeccccac accctaccgc cgccttctg ttggctgctg 960
 accctggggg cagcccagct caacgtcgtc gcaccagctc cttccccgc tctgaggaga 1020
 gtcgatactt aacagcttac ctttctccct gccctggggg agacctgggg gtggggcagg 1080
 ggaaccctt ttcttgagga acctttnagg accattttt ttncttng cattc 1135

<210> 537

<211> 1234

<212> DNA

<213> Homo sapiens

<400> 537

gactagtctt agatcgcgag cggccccctt tttttttttt tttttttttt tgttttttgg 60
 ctctttcaaa ggtaatggcc catcgatgag ctttttaac atactccata gtcttttctt 120
 gtgggtgttag gtctttatatt ttattttttt cctgggggct ggggtggggg tttgtcatgg 180
 gggaactgcc ctttaaattt taagtgcacac tacagaaaaa cacaaaaagg tgatgggttg 240
 tgttatgctt gtattgaatg ctgtcttgac atctcttgcc ttgtcctccg gtatgttcta 300
 aagctgtgtc tgagatctgg atctgcccac cactttggct agtgacaggg ctaattaatt 360
 tgctttatac attttctttt acttttcttt ttctctttt ggaggcatca catgctgggtg 420
 ctgtgtcttt atgaatgttt taaccatttt catggtggaa gaattttata tttatgcagt 480
 tgtacaattt tatttttttc tgcaagaaaa agtgtaatgt atgaaataaa ccaaagtcac 540
 ttgtttgaaa ataaatcttt attttgaact ttataaaaaag caatgcagta ccccatagac 600
 tgggtgttaa tgttgtctac agtgcaaaat ccatgttcta acatatgtaa taattgccag 660
 gagtacagtg ctcttggtga tcttgatttc agtcagggtta aaacaacgga caataaaaga 720
 atgaacacat tctctgtgtg tgattcactc ttgtctaaat gtcccaacct gtgacttctt 780
 tactttccac accactaatt atccaagatc ttgaagaagt attgaacctc taataggcca 840
 tctctgtgga gatcagtaca gtgaacagca ttctggatct tagttttacc aaagattgct 900
 ctgagagttc cagggcgtaa atgcccggga atttcaggat cagcagggtc acaaaattct 960
 cgaaatgtct ttgtagcatt attctgttga atctccattg ctacacaagg gccagaatac 1020
 atttctgtca ccattgtcat atattcggtc actactcctt tataaacttc atagaattcc 1080
 tcaacattaa ccgatccat attgaacatc tgcatagctg agatttcaaa acctgcatct 1140
 cggatagcca tcaggatctt tccaacagt ctttactga cagcatgggg ttaacaatg 1200
 caacaggtac aattagtaaa ttagcagtg tttc 1234

<210> 538

<211> 1539

<212> DNA

<213> Homo sapiens

<400> 538

gcaaaatgtg attatgtttg ttggattgca agggagtggy maaacaacaa catgttcaaa 60
 gctagcatat tattaccaga ggaaagggtg gaagacctgt ttaatatgtg cagacacatt 120
 cagagcaggg gcttttgacc aactaaaaca gaatgctacc aaagcaagaa ttccatttta 180
 tggaaagctat acagaaatgg atcctgtcat cattgcttct gaaggagtag agaaatttaa 240
 aaatgaaaat ttgaaatta ttattgttga tacaagtggc cgccacaaac aagaagactc 300
 tttgtttgaa gaaatgcttc aagttgctaa tgctatacaa cctgataaca ttgtttatgt 360
 gatggatgcc tccattgggc aggttgtga agcccaggct aaggctttta aagataaagt 420
 agatgtagcc tcagtaatag tgacaaaact tgatggccat gcaaaaggag gtgggtgcact 480
 cagtgcagtc gctgccacaa aaagtccgat tttttcatt ggtacagggg aacatataga 540
 tgactttgaa cttttcaaaa cacagccttt tattagcaaa cttcttggtg tgggcgacat 600
 tgaaggactg atagataaag tcaacgagtt gaagttggat gacaatgaag cacttataga 660
 gaagttgaaa catggtcagt ttacgttgcg agacatgtat gagcaatttc aaaatatcat 720

378

```

gaaaatgggc cccttcagtc agatcttggg gatgatccct ggttttggga cagattttat 780
gagcaaagga aatgaacagg agtcaatggc aaggctaaag aaattaatga caataatgga 840
tagtatgaat gatcaagaac tagacagtac ggatgggtgcc aaagttttta gtaaacaacc 900
aggaagaatc caaagagtag caagaggatc ggggtgtatca acaagagatg ttcaagaact 960
tttgacacaa tataccaagt ttgcacagat ggtaaaaaag atggggaggta tcaaaggact 1020
tttcaaagggt ggcgacatgt ctaagaatgt gagccagtca cagatggcaa aattgaacca 1080
acaaatggcc aaaatgatgg atcctaggggt tcttcacac atgggtggta tggcaggact 1140
tcagtcaatg atgaggcagt ttcaacaggg tgctgctggc aacatgaaag gcatgatggg 1200
attcaataat atgtaaagaa aatgccttaa tataaactga ctcagttgaa tacctaattt 1260
gctgagacct cagcgtttcc cttctttttg cgaattgggg agaaagtgt tttttcttgc 1320
ttatcatgca ctctttcctt tttttctcgc ccgtttttcc cctccttttc tttttccttc 1380
cttctttcct ccctttaata taaggagaa atacatgggt tttgtggaaa tcattatatg 1440
tttgcttttag attttcttct gttttcacca tcataacact taagttaa at catgatgtaa 1500
aatttttagta cctcgccgc gaccacgcta agccgaatt 1539

```

<210> 539

<211> 788

<212> DNA

<213> Homo sapiens

<400> 539

```

gagtctcata tccttgact tcagtttttt tgtgtgtgaa tactatccct ataccactac 60
ccctaaaacc tcagaattat ttgcttttatt ttttcataca acttggggaa gggaaccatg 120
ggagtatgca catgggatca taatccattc tgtggtttgg aaaaagaaaa tgtaaacctc 180
tgcttttagag ggtagctact agctttgttg gggataaaaag tgtaatacat gcacttttga 240
actctgaaag tttgccaatc tgaaaagggg tgtttctgaa gaccactatc ttttacgaac 300
acttaaaaaat aagtgtttgc agttgtgtat gggcacgata ctgtattctt tacattttta 360
tgggccctaca gctacttctt atccctgcaa gtatataaat taaaaccaag tcacttttaga 420
acagctttga aactagagtt tcaaaggtaa aaggatctca tgtttctgaa tctgcgtaaa 480
gcaagatggc tgtgatttga caggtttaat tgctagkttt tatagggtgga tagaaatgaa 540
tagtttggag tctttaaaat gttttaaaaa atgtttgctt actatctata tatatgacat 600
tattoccaat tagttttata tctccaagat atatatatgt atataggatg atacacatat 660
gtatatatac atagtctata tattctatat aagaatatat tccaataaga atatattcca 720
tacgggaata tattagtc at tgatgtat tgcgggtaaa attaaaagat attttaacaa 780
aaaaaaa

```

<210> 540

<211> 874

<212> DNA

<213> Homo sapiens

<400> 540

```

ccacgcgtcc gcggacgcgt gggcggacgc gtgggaaaaa agctgcgagg aaattgactt 60
agacaaacac aagagcatcc aaagaaagaa aacagagggtg gaaatagaaa ccgtacatgt 120
cagtacagaa aagcttaaga atcgaaagga gaaaaaaagc cgagatgtag tctctaagaa 180
agaggaacgt aagcgtacaa aaaagaaaaa ggaacaaggc caagaaagga cagaggagga 240
aatgcttttg gaccagtcta ttcttggtt ttgaagctt caaagttggt tctcccaaag 300
ttaaattgaa aaaatagggt agagcttggt tttatgat at cgtgttcat accacttttc 360
ttatgtgaat aggttcttta acttctaaca aaggcctagt aaacaaagtg tttagcatgc 420
ttgctctcca acacagaaat tgcttttcc ctttttctaa aagcattatt acattttttg 480
aacatatagt gtaatttctt ttaatgaaag tgactctgct tttattcatc aaattgcttt 540

```

379

gatggtggaa atatctctctg ttgggaggtt atttatttta aattggagga ttaatgacct 600
ttgcacaatc tgctctctga ttgggtttgt tatagttttg agttgggtat tttatgttca 660
ttggtttttc tctgtgaagc aatttttttc tcctttatta gatctaactt gcagtgtatt 720
ttctaggctg gaaagtggaa aatgaaatat attatratct taggttacat aaagtttcta 780
aagtttcaaa gagtcttgat acaaaatcag tttatattct gaaaatattt ataataaagt 840
attctaattt ctataaaaaa aaaaaaaaaa aaaa 874

<210> 541

<211> 549

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (38)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (536)

<223> n equals a,t,g, or c

<400> 541

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gccggttgcc aggccaaagga gtggactagg gtcgccgggg aagcggtttg ggagagccca 120
tggtgactgc gtgagtggag cccagctgtg tggatgcccc agcatggatg actacatggt 180
cctgagaatg attggggagg gctcsttcgg cagagctctt ttggttcac atgaaagcag 240
taatcagatg tttgccatga aagaaataag gcttcccaag tctttctcta atacacagaa 300
ttctaggaag gaggctgttc ttttagccaa aatgaaacac cctaataattg ktgccttcaa 360
agaatcattt gaagctgmag gacacttgta tattgtgatg gaatactgtg atggasggga 420
tctaatacaa aagattaaac agcagaaaag gaaagttatt tcctgaagac atgatactta 480
atgggtttacc caaatgtgcc ttggagttaa atcacattya cawgaaacgt gtgctnccca 540
agagatttt 549

<210> 542

<211> 467

<212> DNA

<213> Homo sapiens

<400> 542

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gatccaacgt cgctccagct gctcttgacg actccacaga taccgccag ccatggcaag 120
caagggcttg caggacctga agcaacaggt ggaggggacc gccaggaag ccgccatgga 180
ccagctggcc aagaccaccc aggaaccat cgacaagact gctaaccagg cctctgacac 240
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gcctcctgaa atgayagcag ggagacttgg gtgaccccc ttccaggcgc catctagcac 360
agcctggccc tgatctcgg gcagccacca cctcctcggg ctgccccctc attaaaattc 420
acgttcccaa aaaaaaaaaa aaaaaaaaaa aaaaaaagtc gtatcga 467

<210> 543

<211> 1211

380

<212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (1156)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (1165)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (1190)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (1193)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (1194)
 <223> n equals a,t,g, or c

<400> 543
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 ctttttgaca gcaagggcca tgtgaaactt tctgactttg gtctttgcac aggactgaaa 180
 aaagcacata ggacagaatt ttataggaat ctgaaccaca gcctccccag tgatttcact 240
 ttccagaaca tgaattccaa aaggaaagca gaaacctgga aaagaaatag acgtcagcta 300
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 taccacactt tctgttytga gaccttcaa gagacatata agaaggtgat gaactggaaa 480
 gaaactttga cttttcctcc agaagtccc atctctgaga aagccaagga tctaattttg 540
 aggttctgct gtgaatggga acatagaatt ggagctcctg gagttgagga aataaaaagt 600
 aactcttttt ttgaaggcgt tgactgggaa catatcagag agagacctgc tgcaatatct 660
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 atgtggaggc tccatattaa tgcattatct tttaaaaagt tttgataact cttaaagcat 960
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 gagcctgctt tctgccagtc ttgaggttct gaagatcagc tttgaaagga aagtatgtcc 1080
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 ctttgatttt taaccnctag aggangaaaa aggttaggrg gcactctgtn agnntggggt 1200
 gcttagctta t 1211

381

<210> 544
 <211> 1463
 <212> DNA
 <213> Homo sapiens

<400> 544
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 cccctccgcc aagccatatt ctgttgatg agcttcagtg cctaccagac agcctttatc 120
 tgccttgggc tcctgggtgca gcagatcatc ttcttcctgg gaaccacggc cctggccttc 180
 ctgggtgctca tgcctgtgct ccattggcagg aacctcctgc tcttcctggt cctggagtcc 240
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 tgggtctctc tggagactca tgatggacac ccacagctga ccaaccggcg agtgctctat 360
 gcagccacct ttcttctctt cccctcaat gtgtggtgg gtgccatggg ggccacctgg 420
 cgagtgtctc tctctgccct ctacaacgcc atccaccttg gccagatgga cctcagcctg 480
 ctgccaccga gagccgcact ctgcaccccg gctactacac gtaccgaaac ttcttgaaga 540
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 actcagacca ggtcccacac tgagctgcc acactcgaga gccagatatt tttgtagttt 1380
 ttatgccttt ggctattatg aaagagggtta gtgtgttccc tgcaataaac ttgttctga 1440
 gaaaaaaaaa aaaaaaaaaa aaa 1463

<210> 545
 <211> 536
 <212> DNA
 <213> Homo sapiens

<400> 545
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 gcttatgcaa tggcggagc gtttatgtca acaggagttg gagcttctct tatectaatt 180
 gcattaaaag taggaattac tgctaaaact gttgcagtta taggagctat tgtcacatca 240
 atattatcaa tagcaactgg gacaagttgg ggaacatttg cagcctgtgc acctattttt 300
 ttatggctaa atcatatagt tggcggaaat attttattga caacagcagc tattgcagga 360
 ggagcatgtt ttggagataa tataggactt atttcagata ctacaatagt aagttctggg 420
 atccaaaaag ttgaagttgt aagaagaatt agacaccaag gtgtatggc agcattagtt 480
 ttattatcag gaataatagt atttgctatt gttggattta catggattta cccttc 536

<210> 546
 <211> 588
 <212> DNA

382

<213> Homo sapiens

<220>

<221> misc feature

<222> (572)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (577)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (585)

<223> n equals a,t,g, or c

<400> 546

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agtttttctt gaaatcattg taatgttaac tttgttggtt caaatatctt ggtgattgct 180
tcattatctc ttcaacaaaa aaaaccttta attttgccat tgaaactgta gaactatgcc 240
atgcttttat tagaagcagt gctctgtgtt aacaacaaga atgggtgtaat tagaattggg 300
atgtggatat ttactgtatg acaacacatt tacagttctg taatgcaagg atgcagttta 360
aaaatgtgaa gtagtgatgg tttttgaaat aagcttttaa atatagggat cttgaaggct 420
ccctggggta actattttat aacttagata aaatggctag tcatatctgt gtgtttgtaa 480
agttattttt ttaatatttt aagrttacia ttttaacaat gtagraatga gccaaacttt 540
taaattkaaa acagtaarac aaatggaaac cnatagntca caaantcc 588
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<210> 547

<211> 1585

<212> DNA

<213> Homo sapiens

<400> 547

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aatcttatgc acattccatt gtctttgcca agcccagaag ccatgttggt ttcatgttta 180
agaaatttga tagatttacc cagcttttct atgtattttg acttattgaa aatatgtaac 240
aactgagtcg ggttgacgca ctggtggggt agaactgact ttccctgaag gtgacacaga 300
tgtcagaatt gtgtccaggg atttaattta gaccataact gtccaggaga ctgtctctas 360
ytggatctct gtgctgactg actgacagac agacttttagt gtctgtgtgc tgactgacag 420
actctagtag tgtctatatg ttgaccaact ggtagaccag gaggatctgt gtgctgattg 480
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gatagactat agtaaaattt ggggtgttgc tgactaacgg tctaggggtc gtaagctgac 600
agtctgcctg ctttctgatt gtatccattg aagtgtatgt acattatggg aattctctgt 660
ctattaaatg tgtctaaca aggaaggaat taagcactcc acrtgttttc tttatagggg 720
agttctgtac actatgattt taaatagata tttcttatat agtagtggcc aaattctcat 780
tattttgtac aagataaagg ttatgcatca cttttatggg attttgtgaa ctcagctaag 840
ggaatgcctg ttcagagcct ggagttgtta cctttacttg aagtcactc atccagtcct 900
ctgcttttagg gcaggacttc agttccactg ttcatttctg aagcttctgt gtccccagct 960
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383

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taccctgttc tgraatgttg tattccattg gacagggctg ctatttttag tcagccatgc 1020
atttggtatt tacrcttaat ctagtaagta aaaatgagaa gaaaatttgg catttaaaaa 1080
ttgattttta gggttggcaa aagtattttt tccagtaagc ctttcactgg atatctgtga 1140
ccaatgttta cctacgcaat gtttttgtat ctgaattgct tatgtacgtt ttttattata 1200
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ggtgacactg ataacaaagt atgccactca gatccattta aagtgtgcat aactgtattt 1500
gaaatgtgtt tttgtgtgcg tgtgtgtaga atgggtaaat aaaattgttg agtaacttga 1560
acctaataaa aaaaaaaaaa aaaaaa 1585

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<210> 548

<211> 1279

<212> DNA

<213> Homo sapiens

<400> 548

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aggatgtatt gtacacgcta tttgaatggc catggctaag caattctcac ttggtgctga 180
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gcaggagagc tattgaaatt gtagagtcag atgtcaaaag ccagactatt ctcaaaccac 480
tgtctgaatg taaatcacct tctgagcctc tgattcccaa gagggttggg cttattcaca 540
tatcccaagt catctcagaa gttgatggta acaggatgac cttgagccaa gaaggagcac 600
aagattcctt ccctcttcag cagaagatct tgggttgctc tttgatgctc ttgatcaggc 660
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gcaaacagca ggtggcggct gtggaccagt cagagtgttt gtcactttca gggctcttgg 780
aagccagggg catttttaga ttaaagagaa acaaggaaac ccgtttgaca aagggtgttt 840
tcaagattga agagaaagaa atagaacatg ctctgaaaga taaagcttta attggaaata 900
tcttagctac tggattgcct taaattcttc tcttacaccc caccgaaag tattcagctg 960
gcatttagag agctacagtc ttcatttttag tgcctttacac attcgggcct gaaaacaaat 1020
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gaataatatc tttgggtctt actattttta ccataaaaag tgaccaggta gaccttttt 1140
aattacattc actacttcta ccacttgtgt atctctagcc aatgtgcttg caagtgtaca 1200
gatctgtgta gaggaatgtg tgtatattta cctcttcggt tgctcaaaca tgagtgggta 1260
tttttttggt tgttttaaa 1279

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<210> 549

<211> 1389

<212> DNA

<213> Homo sapiens

<400> 549

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ggaatgttag atcaccttaa caagaaggag ctccggggcc aactcaagat ggtggacagc 60
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aaggacctgg agcggaggcg ggaagaaagt cagaccaga tccgagatcc ccacgcagaa 180
tgcacaggtg agctgccgct gggcccgag catgctgggc gtccccacct cgcagactgc 240

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384

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acgctccaac cgcccsctcc acctmctctt tccaggcccg gcagcttctg gagaaggaat 300
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tcagccgctc cccatcctgg cggaagatgt tccgggagaa ggacctccga ggcgtaactc 420
ccgactcagc tgagatgttg ccccccaact ttcgttcggc tgcagcggga gccctgggct 480
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cagacggcgt ttcggtcagg acctattcct gctagtgcag gcctccaggt gacctcactc 600
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aaaaaaaaa 1389

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<210> 550

<211> 539

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (228)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (508)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (515)

<223> n equals a,t,g, or c

<400> 550

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ggaaggcaag ggtatttttt acaacatcaa aaactttgtc cgattccagc tgagcacgag 120
catctccgcc ctgagtctca tcaactctgt caccgtgttc aacctgccca gccccctcaa 180
cgccatgcag atcctatgga tcaacatcat catggatggg ccaccggngc agagggtgagg 240
cagggcggct gggagccctg tgtctcttta cctacctgcg gggcttcctc caggggctgc 300
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385

<210> 551
 <211> 1089
 <212> DNA
 <213> Homo sapiens

<400> 551
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 cgtctccctt tttctttaca gtattagtaa aatgaaaaat tgtacacttt ctgattttta 540
 cttcactaat gtaattactc tctcaagaag cttttaaaaat tttaaattacc atcacacaac 600
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 tgctgtaaca ctactgttgt tggattttat tgtttggtga taaatgtata caatatttct 960
 aagggaaact atgtactgtg atgtaaaagt ctgggcaaaa tgtatataat cctgtatata 1020
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 aaaaaaaaaa 1089

<210> 552
 <211> 1938
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (555)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (1521)
 <223> n equals a,t,g, or c

<400> 552
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 gcaagaggta aacaagacaa gcaactacgtt ggttcaagtt gaagctggag gtcatttttt 180
 gccccgtgaa gctgagccct gaagaagaaa gtcacatgt atccatcttt gttacctttt 240
 tggatttgac gctgatccag atcctcctgg gaccttcaat ccgctgcttt tacaaggatg 300
 aaaaggattc tgatgacttt ttttgaactg tttgggcagg aatgctacag rgagaaycaa 360
 tttctgtgaa ctgagagtcc ccagggtgata atttggtgtt tcacacacag gcagtttctt 420
 tttaaatgtg tgggtgctttt ttagtcawct ggctttgcaa acccyagtgt ttgaaaaaca 480

386

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gggatgtagt tcagcagtgt ctgaataagg ctgatgactc agaatcatgc agtgcctggc 540
ttctcaggcc gccgncagcc gggactgctt taggcgcgaa cccacgcttc tgacctgtgc 600
tctgtctttg cagttctgca cggagctaaa ccagccgacc ctgcccaaca tccgcaagtg 660
ggaagggggc ccgggggatgc tgggaaggctg ttgttgctga gaagccctcg aatcagctcc 720
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<210> 553

<211> 1442

<212> DNA

<213> Homo sapiens

<400> 553

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387

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<211> 1446

<212> DNA

<213> Homo sapiens

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<220>

<221> misc feature

<222> (37)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (57)

<223> n equals a,t,g, or c

<400> 554

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388

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 aaaaaa 1446

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 <212> DNA
 <213> Homo sapiens

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<220>
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<220>
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 <223> n equals a,t,g, or c

<220>
 <221> misc feature
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389

<210> 556
 <211> 2001
 <212> DNA
 <213> Homo sapiens

<220>
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 <222> (1979)
 <223> n equals a,t,g, or c

<220>
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 <222> (1991)
 <223> n equals a,t,g, or c

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390

<210> 557
<211> 2524
<212> DNA
<213> Homo sapiens

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<222> (308)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (596)
<223> n equals a,t,g, or c

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391

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<211> 2667

<212> DNA

<213> Homo sapiens

<400> 558

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393

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<210> 560

<211> 1837

<212> DNA

<213> Homo sapiens

<400> 560

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394

catcagcctt ttcaagtatt taaataaata actgctgtgt actgtgatct tgagttcttt 1800
 tgtcatctaa agtaaattatt tctgtacaga taaaaaa 1837

<210> 561
 <211> 1682
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (3)
 <223> n equals a,t,g, or c

<400> 561
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 gtgggggtgat gagaaatctt ccttcattctg caacacactc cagcctggct gcaacagcgt 240
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 caaggccac atctcaggga cactgtgggtg gacctatgtc atmagcgtgg tgttccggct 480
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 ccctcctcac tgatgtgact ccagaaacag ggtatctgac agcacagggt taagattagt 1620
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 ac 1682

<210> 562
 <211> 1694
 <212> DNA
 <213> Homo sapiens

<400> 562
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395

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gcgggcgccct gtaatcccag ctactcggga agctgaggca agagaatcgc ttgaacccag 120
gaggtggagg ttgcagtgag ccaagatcgc gccactgcac tccagcctgg gcgacagagt 180
gagattccat ctccaaaaaa aaaaaaagaa aaaaaaaga aaagttctgt gttgatgtac 240
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tcagtactta agcaaatact gagtagtggt ttaaattcag aaatagagct tctattatga 480
acacatgaga atgatttttt tctcttaatc attattaagg aaatatttta atttcatggg 540
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aagtagccag aaatgttaga acaggtggaa atgtatacat tatttgatgg tttgtttttt 1620
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cactaaaaaa aaaa 1694

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<210> 563

<211> 949

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (867)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (874)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (914)

<223> n equals a,t,g, or c

<400> 563

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396

```

ggatgatgga gagtaagatg attgctgcca tacactccag cagtgcagat gccaccagca 120
gttcaaatta tcattccttt gtcactgctt catccacctc tgtggacgat gcattgcctt 180
taccacttcc tgteccacaa cctaagcatg cttctcagaa aacagtttac tcctcctttg 240
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accaagtgtg tgggtgccagg tcagagccac cagcctccat ggggtcttctg tataacacat 420
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atgtgtcttc tttgagctcc tctgtcagga atacctgtta cccgaagac attccaccgt 540
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```

<210> 564

<211> 503

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (15)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (20)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (500)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (501)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (503)

<223> n equals a,t,g, or c

<400> 564

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aaacagggag aaganaggan agaaaaaggg ggattagtta tatcaaaaag cctggaaagg 60
tggaatgga ccaaaaagat gggactcctc ctttattcca gcatggaggg ttttaaagg 120
aggatttctt ttttcctgcg acaaaacgtc ttttcacaac ttaccctgtt aagtcaaaat 180
ttattttcca ggaatttaat atgtacttta gttggaatta ttctatgtca atgattttta 240

```

397

```

agctatgaaa aataataata taaaacctta tgggcttata ttgaaattta ttattccta 300
ccaaaagtta cccacacaaa aagttactga gcttccttat gtttcacaca ttgtatktga 360
acacaaaaca ttaacaactc cactcatagt atcaacattg ttttgcaaactc actcagaata 420
ttttggtctc attttgagca gaatttttgt ttttaatttt gccaatgaaa tcttcaataa 480
ttaaattatg taaaaagtcn nan 503

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<210> 565

<211> 374

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (357)

<223> n equals a,t,g, or c

<400> 565

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accactgttg cagaagctcc tcacagagta tgtgtcagggc atttttaacc tgctaaaggc 120
aagaagaagt gttcaccaca tagttgcaaa ggtcttcaac ttgccacagc caacagaaaa 180
atcaaaatga ttgaaccctt tgggaatcag tatattgtgg ccaggccagt gtattctaca 240
aatgcttttg aggaaaatca taaaaagaca ggaagacatc ataagacatt tctggatcat 300
ctcaaagtgt gttgtaactg ttccccacaa aaggcaagag aattgtcctc tctttgnttc 360
ccatagcatt ttgg 374

```

<210> 566

<211> 1652

<212> DNA

<213> Homo sapiens

<400> 566

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ctgctgcata ctgctaaatg gcacctctgg gattggccta cctggggatt tcttggtttg 180
tgaaaacagg agaggagaaa tatctcatalc aagtgaagg atactggaga gagaaattac 240
ccatttctaa aaaaaaacca cactctgtcg tatctgtgtt aatgttttct agcatgtact 300
ctggtttcaa cagacacaaa tttatatgtt aaccagttt tcttgccgtt ctgtaagtgt 360
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ttgtctgaag aaaggaaaga ggaaagcaaa tacgaattgt actatttgta ccaaatcttt 1200

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400

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tcctctgcag ggagaccatc cagcccaagc tctgggaggc acagtccatt gagtgggagg 240
aggccgcggg tgctgagccg gggaggggtgc tcggagtcca tccatccctc agacggcaag 300
tcccacaggg tccaacccac ctgaaacctg cctgcacggg ggaagtgggtg gagggtggaca 360
ctcctagggg ctttttctaaa gctagactcg cagctccttg ctcaggaaaa ttaaactatt 420
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gaccgctgct tcggagaagy tctcgaccct aactgcagtc actgttactt ggatcagatc 660
aagcgtagtg actttttggg attcagtggg tattctccac acttcgtagc catttcaacc 720
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attctattaa aaacatttca aggcattttg ggtgcaaact ttgtttataa aagagaaata 1920
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tagtactgac acatgcgtgt gtgtgcgctg tggtgcgtgca cgtgctgttg 2040
ctgcccttcc tagctggtgt gaggaagccc ggacgcgtgg gtcg 2084

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<210> 570

<211> 982

<212> DNA

<213> Homo sapiens

<400> 570

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ggcagcagct tacagacgct gccagcatcg ccgccgccag aggagaaatg tctgaagtaa 60
gacctctctc cagagacatc ttgatggaga ccctcctgta tgagcagctc ctggaacccc 120
cgaccatgga ggttcttggc atgactgact ctgaagagga cctggaccct atggaggact 180
tcgattcttt ggaatgcctg gagggcagtg acgcattggc cctgcggctg gcctgcatcg 240
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tgacagcct gggctctggc ttcactctac accagactga ggacatcagg gatgttctta 360
gaagtttcat ggacggtttc accacactta aggagaacat aatgaggttc tggagatccc 420
cgaaaccccg gtccctgggtg tctgcgaac aggtgctgct ggcgctgctg ctgctgctgg 480
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gctcagggcg gggctggccc ccccccatg accactgccc tggaggtggc ggctgctgc 600
tgttatcttt ttaactgttt tctcatgatg cttttttata tttaaacccc gagatagtgc 660
tggaacactg ctgaggtttt atactcaggt tttttgttt ttttttatc cagttttcgt 720

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401

tttttctaaa agatgaattc ctatggctct gcaattgtca ccggttaact gtggcctgtg 780
cccaggaaga gccattcact cctgccccctg cccacacggc aggtagcagg gggagtgtgtg 840
gtcacacccc tgtgtgatat gtgatgccct cggcaaagaa tctactggaa tagattccga 900
ggagcaggag tgctcaataa aatgttggtt tccagcaaaa aaaaaaaaaa aaaaaaaaaa 960
aaaaaaaaaa aaaaaaaaaa aa 982

<210> 571
<211> 872
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (865)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (867)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (870)
<223> n equals a,t,g, or c

<400> 571
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ctcagcctgg ggaccccaac tccaggccct ccagcccaa acctgcccag ccagccctga 120
aaatgcaagt cttgtacgag tttgaagcta ggaaccacg ggaactgact gtggtccagg 180
gagagaagct ggaggttctg gaccacagca agcgggtgtg gctggtgaag aatgaggcgg 240
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ccagctcaca cagcaaaaac aatggacagg cccagaggst gaagcaaaca gtgtcccttc 720
tggtgtgtgt ggagcctccc cagtaaccac ctatttattt tacctcttcc ccaaacctgg 780
agcatttatg cctaggcttg tcaagaatct gtccagtcct tctccttctc aataaaagca 840
tcttcaagct tgtaaaaaaa aaaaanantan aa 872

<210> 572
<211> 733
<212> DNA
<213> Homo sapiens

<400> 572
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ttatagcgcg gcaagccgaa tcttagaggc taaccgggca ggtgggaggg agaaagttgc 120

402

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tttctgcacc aatagctgag gcgttcaggg ttgtccaggg acgctaccct cacgtgtctg 180
gttccgagtg ctgcgttcgg ctgtgctggg aagttgcgta gacagtggcc tcgagaccct 240
gcctgcctga ggaggcctcg gttggatgcg aaggagctgc agcatccagg ggacaagatg 300
ccaactggca agcagctagc tgacattggc tataagacct tctctacctc catgatgctt 360
ctcactgtgt atggggggta cctctgcagt gtccgagtct accactatth ccagtggcgc 420
agggcccgag gccaggccgc agaagaacag aagacctcag gaatcatgta gaactggggg 480
gctttttctc ctgagcagag agggcccaagg catgctgtgg agagacttca cctgccacca 540
tttccaggtc aacaggacta gagcgttgat ggttttcaaa ccctgttgga agaaagtgcc 600
catggtttct ctggttctgc cagtttgaca gtttatggag gcttttgaat cgtaatatga 660
atgtgagggg gaggtacacc tacagacatt aaataatttg ctgtgtcaaa aaaaaaaaaa 720
aaaaaaaaagtc agc 733
```

<210> 573

<211> 569

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (274)

<223> n equals a,t,g, or c

<400> 573

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gctccctcac tctcaggaaa tgctgacca tgggcaggag actgtggaga ctgctcctga 120
gccccagct tccagcagga gggacagtct caccatttcc ccagggcacg tggttgagtg 180
gggggaacgc ccacttccct gggttagact gccagctctt cctagctgga gaggagccct 240
gcctctccgc ccctgagccc actgtgctg gcgctcccg cctccaaccc ctgcccagt 300
cccagcagcc agccaaacac acagaagggg actgccacct ccccttgcca gctgctgagc 360
cgcagagaag tgacggttcc tacacaggac aggggttcc tctgggcatt acrtcgcata 420
gaaatcaata atttggtgtg atttggtatc gtgttttaac gagtttcacr gtgtgatttt 480
gattattaat tgtgcaagct tttcctaata aacgtggaga atcacaaaaa aaaaaaaaaa 540
aaaaaaaaaa aaaaaagtcg tatcgatgt 569
```

<210> 574

<211> 1718

<212> DNA

<213> Homo sapiens

<400> 574

```
agtaccatcc tcgaggactg tccacgaggg cctgaggaat caggagctga actccacaga 60
gtcagttatg attaatggaa aatattgctg tccaaagata tacttcaacc accgttgctt 120
ctcagggccca tatcttaaca aaggaagaat tgctgagctg cctcaatgtg taggacctgg 180
gaactgtgtt ctggctcctta gagagcctac aaaccagcc gtgtccttcg ggagctccag 240
ctggacaaag actctgtgtg gcacggatgt ggggaagtcc taaaagccaa atataaagga 300
aagagttatc gggctactgt tgagatagtg aaaacagcag atcgggtgac tgaattctgc 360
cggcaaacct gtatcaaact ggaatgctgt cctaacctct tcggtccacg gatggttctg 420
gataagtgtt ctgagaactg ttctgtactt acaaagacca aatacacaca ctattacgga 480
aagaagaaaa ataaaagaat tgggaggcca cctgggtggc atagtaactt agcttgtgcc 540
ctgaaaaaag ccagtaagag gagaaagagg cggaaaaaat tttttgttca taagaagaaa 600
cgctcctctg catctgttga taatacccca gcgggctctc cccagggaag tgggggtgaa 660
```


403

```

gatgaggatg acccagatga aggggatgat gattccctaa gtgaaggcag tacatccgag 720
cagcaggatg agctacagga agaatcagaa atgtcagaaa aaaagtcag ctcctcttct 780
cccacccaaa gtgagatata cacatcgctg cctccagata gacaaaggag aaaaaggag 840
cttcgcacct tttcattttc tgacgatgaa aataaacctc cttcaccaa ggaaataagg 900
atcgaagttg ctgaaaggct tcacctggac agtaaccctc tgaagtggag tgtggcagac 960
gttgtgcggt tcatcagatc cactgactgt gctccattag caagaatatt cctagaccag 1020
gaaattgatg ggcaggccct gttgctcctt acccttccca ctgttcaaga atgcatggac 1080
ttaaaattgg gccctgccat caaactttgc catcacatag agaggatcaa gtttgctttt 1140
tatgagcagt ttgccaaactg agaaggacaa ccaaagttag ctggatcttt gaagcacaaa 1200
tgcagcaaat ccttcaccct gctttataag tggagctgga atagtcctgg ggctctgggg 1260
cctgcaggta tcagcttgct ctctttgcac tttcggggaa ggaggactca cagtggaggaa 1320
gcaaaaactg tgcacagaag tggatcacct gctggtggaa atgtggacat ctcttggtca 1380
gcagatggca gtttttaaaa aataaagggt gtgaggaaaa gacttatata agaagaaaag 1440
catttccagt ggtgtggcct gaaaacaaag aataacctag gctgctggaa agcacccttt 1500
tggttggttt cattctgttc cctcccattg tagattgaac tttgttctct gctttctttt 1560
tcttggaag agaggactta gctttaagtc agcactgatt tgggactgtt cctaaggcat 1620
atcagtgtt cattgtcatt gtgtttttaa actttttaa attaaaacag ttcatttttg 1680
ggatgaaaaa aaaaaaaaaa aaaawraaag tcgacgcg 1718

```

<210> 575

<211> 1544

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1538)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1539)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1544)

<223> n equals a,t,g, or c

<400> 575

```

agtgggatcc aaagaattcg gcacgagggg attaggtaaa agtcttgag tgaaaaaccc 60
gaggaccctt accgcaagtg tcttttgctc ccagctactg atactggatt ccactcgtga 120
ttctcccttt cttagcgcat tcatgatata gacatcagtc tctgagctgg aggaggacaa 180
aggcagcggt cctgtgaatt ctatgctcta gcttgggtta agggatttgg aattgcactt 240
gtttcagaga gctccctctt tgcccactag cagggcatta gctggtgctg aagacagtgg 300
ctgcttggcg agcctggatc tccaagtgac cccctcagca actcctgatg aacaggactg 360
aagccaatat taaagcaagt caaccaaagg ttctctggtg tagacaagac agcaaaagga 420
cagactacct tgtggaacct agcattgttc tcttctgca gactaagta ctgtgtgcag 480
aaatgtgatt gagattcaag tcagggcctc tctgcccttt tccctccaga aacaaaacca 540
agataattta tcttgaacac ggtgaaaaaa ggaaggaggagg gaggagaaaa agtccgggtc 600
tcacctggga ttctctgtct cctgcaacat gaaggattta gcctgggagg aggtggtgag 660

```

404

```

aactctggga gagaaaaaag aaggaaagaa tagttttacc catgctgaag ttaatttaa 720
ccttcaccta gagaagcaaa aaaaaaaaaac ccacactttc ccattttgtg cctcccttcc 780
tagagtttta gccaaagggt tagctaagta attggtttta ccagcgcaact cactcctcct 840
atcccaagtc tgtttgactc cctcccatc atcctcctca cctcttttca ggcagggtgg 900
ggatagcagc aggaggagat tttgggagcc tggcaactcc tgcaaggacc gcaggacagc 960
ccctctgtgg ggatgcgtgg tgcccatct gccgcccttc tgaagaatgc actgccttca 1020
ctttttactg tgttagagtc catccagact gttctatcca aaaaagtttc tttttccccc 1080
acaggcaatc aggaaatgat tcctttcccg actgcttctg tctagtgcct gggaatcttg 1140
agtcaatccc tcagtaagtc agtgactagg gaaatccctc tctgagcctc ccagttcatg 1200
ttgcttaggg aacctgatat tttcgtgaaa cctgcctaca catgggcagc ccaacagcag 1260
aacaaatggt ggtgaccaa gtgaacaaag aagtatagtt gtgccagctt cgtagttgcc 1320
catgtggaca agtcagcagg atcaggacac gaggaagagt aaatgtgaga cagtcaatgt 1380
gacttctgcg ataaacagat ttttaaacc cgaattttg caaaattttg gtgaaacctg 1440
aactttcttc gttgcatata ctggcactat ctgtaccatc atacaactgt ctcacattaa 1500
agctattttt cttgggcaaa aaaaaaaaaa aaaaatgnna aan 1544

```

<210> 576

<211> 660

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (74)

<223> n equals a,t,g, or c

<400> 576

```

catcagttct atttaatact tatggcaatt aagagattta gaaagcagag gaaaagacca 60
aaaaaaaaag atngnattaca aagtgtcatc atgctttag gacccagca ttcttgaaac 120
taacgcacct ttaaaaagta atatttacac tgctgtaaat atttgcaaag tatcaatgtt 180
taattcactt agaattttta ggattatgga ttactagcg aaaattcccc taaagcaact 240
ttcccatatc agtaactttt atttagggaa acaagtttaa tgtacataat acatgtgacc 300
ttggaattca atagaatttt cgaaactaga agtaactcag aacrttcact agatggtttt 360
aaagtcyttt ttgatactgt ccytaacatt tgcytatttg cmaattaata tgtaagaatg 420
rgtcyaaaag taagtttttag gaatggttat tcgacaaaga tgttattcct attaccaata 480
ctgcgaaatg ataattacag aaacaatgtg ggatccgttt tataacttca aatttaagtt 540
cctttgtact ttggagcaga aaatgtaaga aatcgaaatc aagagttagt attttttacc 600
tttcaggctg gctttaactg ttcatacacc tagcaaaata aacattttgtg aaaggcggtta 660

```

<210> 577

<211> 574

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (29)

<223> n equals a,t,g, or c

<220>

<221> misc feature

405

<222> (332)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (532)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (550)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (565)

<223> n equals a,t,g, or c

<400> 577

```

aaatttactc cccagtacaa aggtgtctnt tgatcacagt aacccatagt cccccactgg 60
ggggacggtg ggggaagact ttgggaggat ttaccacaga atacttgccg cctgcttttt 120
gtcctccagg aaaccagaag cccgggtaat taggacaaag ccaaaggccc cttgttagct 180
ggccatccct gccccatfff ttcccctggg cctttcccct gtggccacag ggaagtgtgg 240
cctgaatacc ccaccccggc tcctctgcac ccagagctgg gggccacctc agaagtgtca 300
tctctctctg agcacgcatt cccctgcagc antcgaggaa tgagcagatt gagtgatgct 360
ggggcagaga ggcctgggag gaaagggtgt cagccagtcg tttgtaaggc gctcgtcggc 420
acctgctgaa acgccccacac ctgacagccc catcctcaaa gactgtctta attactcatg 480
gcaaggttct agagacttaa ggggaaaagc tgctttaagg ccaccacatg tntgtgctcc 540
ccaaccagtn tatctggcct ggggntcatt ttgg 574

```

<210> 578

<211> 939

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (85)

<223> n equals a,t,g, or c

<400> 578

```

aattcggcac gagccaaagt gcagggatta caggtgtgag tgagccaccg cggccggcct 60
ctatcatttt ctgactcagc agctncacca aaattgacat cctagcaaac actgtgaagg 120
aattaaccta agtgcttcca gagcatctca tgtaacctct atggagtaag tcactttttc 180
tgtaacatgt ggcttttgac cttgatgaag actttgactt ctcacccctg tctacatgga 240
ggaagatgat tcagtgggtg ggaatatgaa cctcggtaac atttccaatg tccttcaaga 300
gggaaacaag ttcagtgtta tcacgtgggc attcgtagt tttttttttt taaatcactt 360
gttttagatac aactttatft ttttatacct acatagcaca tgactggggg gataaagcat 420
gtataagttg ggagagggta aagaatgtgt gactatgtat acagaaaata gactaaaatg 480
tgcagcaaaa tgatatatac tgtaatctgg tttttgaaat atctactatt ctggaatatt 540
gttaaacaac tttttgcttt tgaaaaaaaa aggtgccttg attcagttgc gtgacttaga 600

```

406

```

acattcatcc tattttattg tgatttttaa tgtcttctga ccccaaactg tgtttttggt 660
tgcagtctgg cggctgcagg catagcgtcg gttttgttcc aataacagag accaaagagt 720
taatcagata tggttcagct gctacaattg tatgattcaa aggcaattta atcaccctaa 780
atttccatgg cccccacagt caagacctgc cattcgtttt ctcttgacagg ttggagtaaa 840
tttgcacttt gaatcatgtg ggtcatttgg ggaccttggt cttttctatt ttgctttatt 900
aataaaggaa cttgtagaaa aaaaaaaaaa aaaaacact 939

```

<210> 579

<211> 778

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (35)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (59)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (778)

<223> n equals a,t,g, or c

<400> 579

```

caccagccc ggagatacca tccaccagaa cctgngccat ggccatttag tcctaaagnc 60
agttgtcaaa gcagggctgt acgtcgggat tcgggaaatt caccagcgtc cgcaacctca 120
gtccctcaag gccatacctg gacccaacgg tgaagaaaga cgatgaggag gaggaccgc 180
tggaaccagt gatctccgc tctggctgtg ctgcctccca ctttgcagtg caggagtga 240
tgggcccagca ccaggactgg cggcaatgcc agccacaggt gcaggcggtc aaggattga 300
tgagtgaaca gcaggcgagg cggcaagagg agctgcagag gaggcaagaa caagccggtg 360
cccaccactg agaccccaaa ccacctatcc ccagtagatg gccctgcaa gaccagcacc 420
cagcaagatt atagaggaag aaatcctaaa tgctgggtgtg ggaggtctaa aacatgggga 480
gagtttttgg atctggagtt gagagccatg ggtttggaca tgactggcac aaacagctgt 540
catatgttca tggtcagatg tcatacatte tcagctgtct tgttccacca gtatttacca 600
ggaaaacaaa gaatgtgtta agggatgctc cccaccccca catcttaagt cagtgtgcca 660
agtactgaga tgattttagg gacattttat tttaaattaa atttacaatc taatggtaaa 720
ttgaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaagg gggggggg 778

```

<210> 580

<211> 626

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (432)

<223> n equals a,t,g, or c

407

<220>

<221> misc feature

<222> (434)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (470)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (537)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (617)

<223> n equals a,t,g, or c

<400> 580

```

gcgcttcaca gcttcctcct cgtctgggat ggtgcccaaa ttgccagctg gcaaaatgaa 60
taaccgtgat ctcaaaccac agcctgatag agtcttgctt ccgttgccca ctgcctatga 120
gctagacagc accaaactga agagcccact aattacttcc cccatgttcc gtaatgtgcc 180
cacagcaaac cccacggagc cgggaatcag acgggtyccg ggggcctcar aggtgatccg 240
ggagtcgagc agcacaacag ggatggtcgt cggmattgtg gctgctgccc ccctctgcat 300
cttgatcctc ctgtacgcca tgtacaagta caggaacagg gacgaggggt cctatcaagt 360
ggacgagacg cggaactaca tcagcaactc cgcccagagc aacggcacgc tcatgaaggg 420
agaaagcagc anantcgaag gagccggcca caagaaacca gaaaaaacn tgggacaggg 480
gaagtattta acgtggtaaa accattggcg aaaccaactt gggttcaaca accgccnaag 540
ttttttttca ccaagggtta atttttcctt aattcccaac gggcccttta tttgaaaaat 600
ccttttttgg ggaaccnggt tggaaa 626

```

<210> 581

<211> 645

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (595)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (604)

<223> n equals a,t,g, or c

<220>

<221> misc feature

408

<222> (608)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (621)

<223> n equals a,t,g, or c

<400> 581

```
gcttggtatta tatctaaatg gattatttgt taaaagtact gaaatgagta taaggcagta 60
tcacccatcc aaaagaaagg tctttataga cctgcacagt cactagatta attcattaaa 120
atgccccac cctgatgtaa ttgacattac atttcttaac attttaaaat ctagaatttc 180
taaaatggaa tttaatgcca tcacaatttg aaaaactttt ttttttttt tactatagaa 240
gttacaaagg aagttctaaa attatgcctc cctctgtttt tataagttgc catcgaaaag 300
tgattttaat aagcagggtta tctttataga ttttaaagaa aactagaaag ttytaatgtt 360
ttaacttggg gaaaaataca tctctttaat gttagcatg cttgtcaacc ttgagtgagt 420
gtcattttta agaacagttg tagcccttct gattattgca gtagctgtag aagtatgtaa 480
gaatatgtga tgggtgtagt cattagcaaa gcattttaa cacttgagta ttttgtcatg 540
gktcattatt attaaagcac aaaataacct attgttagaa aatatgtgtt ttatnaatga 600
atgnaaanta attaaaaaaa naaaaaaagg ggcggccggt ctaga 645
```

<210> 582

<211> 369

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (339)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (352)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (362)

<223> n equals a,t,g, or c

<400> 582

```
gggagggtat ggggcacact tccccaaggg cggacccagc aggaggaagc ccaggagctg 60
ggctctgccc cccaggagct gggccctgcc acccaggccg ggctaggagc atggcagggc 120
ctgggcatcc tggcgctgga cttgggcgac ctgggaggca caggagggg agagatgggc 180
ggccccgccc cagcgcagtg ccggccacac ccatgcaccg aagctcctcc ctgccacacc 240
ccaaggcggg tgccggagct taagccccgc cccagcagc gagaacatcc cccccccac 300
ccccctgcag ccagtgtctc ttgtcaagct cccccgtna ctccagtggg anccaccccc 360
gngagggggg 369
```

<210> 583

409

<211> 1269

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (719)

<223> n equals a,t,g, or c

<400> 583

```
gcgagcgcgt gggcggcggc gtycagggtc ggcagcaacc gcagscgagc ccgagcgggt 60
ggcggcgcca tggcgtgcgc ggggctgctc accgtgtgcc tgctccggcc gcccgcgccc 120
cagccccagc cccagacccc gcggcacccc cagctcgcgc ccgaccggg gcccgcggga 180
cacacgtct tccaggacgt tttccgcaga gcagacaaga atgatgatgg gaagctctca 240
tttgaggaat tccagaatta ctttgccgat ggggttctca gcctggggga gctgcaggaa 300
ctgttcagcg gcattgatgg gcattctacc gacaatttag aaacagaaaa actgtgtgac 360
tactttctcag agcacctggg tgtctaccgg ccggtgctgg ctgcattgga atcgctgaac 420
cgtgcagtgc tcgctgccat ggatgccacc aagctggagt acgagagggc ctccaaagtg 480
gaccagtttg tgacrcgctt cctgctgcgg gagacggtga gccagctgca agcccttcag 540
agctcgtcgg agggggcgtc agataccctg gagggccagg cccatggctg gcggtcagat 600
gcagagagcg tggaggcgca gagcaggctc tgcggcagcc ggcgggcagg acgccgagcc 660
ctgaggagtg tcagccggtc atccacctgg tccccggct cttctgacac agggcgcant 720
cagaggccga gatgcagtgg cggctccagg tgaaccgcct ccaggagctc atcgaccagc 780
tcgagtgcaa gggccccggc ctggaacccc tgcgtgaaga ggacctggcc aaggggcctg 840
acttgacat cctcatggcc cagaggcagg tccaggtggc agaggaaggc ctgcaggact 900
tccaccgagc cctgcgctgc tatgtggact tcacaggggc ccagagccat tgtctgcatg 960
tgtccgcccc gaagatgctg gacgggtgct ccttcaccct gtatgagttc tggcaggatg 1020
aggcctcctg gagaaggcac cagcagtcgc ctggcagcaa ggccttccag cgcatectca 1080
tcgaccactg cgggccccgg acacctcac cactgtgttc tccccagcct cctgggtggat 1140
aatgaataac aactgagcca gacctgcaca cgccgagggc cccgggaccc tgccctgcctc 1200
tgaacccag gtgggacccc agcacagagg caataaaggc agtgggtccct tccaaaaaaa 1260
aaaaaaaaa 1269
```

<210> 584

<211> 1943

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1177)

<223> n equals a,t,g, or c

<400> 584

```
gctgatccag aacgtcaccc agaatgacac aggattctac accctacacg tcataaagtc 60
agatcttgtg aatgaagaag caactggcca gttccgggta taccgggagc tgcccaagcc 120
ctccatctcc agcaacaact ccaaaccgct ggaggacaag gatgctgtgg ccttcacctg 180
tgaacctgag actcaggacg caacctacct gtgggtggga aacaatcaga gcctcccggt 240
cagtcacagg ctgcagctgt ccaatggcaa caggaccctc actctattca atgtcacaag 300
aaatgacaca gcaagctaca aatgtgaaac ccagaaccca gtgagtgcca ggcgcagtga 360
ttcagtcatc ctgaatgtcc tctatggccc ggatgcccc accatttccc ctctaaacac 420
```

410

```

atcttacaga tcaggggaaa atctgaacct ctctgccac gcagcctcta acccacctgc 480
acagtactct tggtttgtca atgggacttt ccagcaatcc acccaagagc tctttatccc 540
caacatcact gtgaataata gtggatccta tacgtgccaa gcccataact cagacactgg 600
cctcaatagg accacagtca cgacgatcac agtctatgca gagccacca aacccttcat 660
caccagcaac aactccaacc ccgtggagga tgaggatgct gtagccttaa cctgtgaacc 720
tgagattcag aacacaacct acctgtggtg ggtaaataat cagagcctcc cggtcagtcc 780
caggctgcag ctgtccaatg acaacaggac cctcactcta ctcagtgtca caaggaatga 840
tgtaggaccc tatgagtgtg gaatccagaa cgaattaagt gttgaccaca gcgacccagt 900
catcctgaat gtctcttatg gccagacga cccaccatt tccccctcat acacctatta 960
ccgtccaggg gtgaacctca gcctctcctg ccatgcagcc tctaaccac ctgcacagta 1020
ttcttggctg attgatggga acatccagca acacacaaa gagctcttta tctccaacat 1080
cactgagaag aacagcggac tctatacctg ccaggccaat aactcagcca gtggccacag 1140
caggactaca gtcaagacaa tcacagtctc tgcgganstg cccaagccct ccattctccag 1200
caacaactcc aaacccgtgg aggacaagga tgctgtggcc ttcacctgtg aacctgaggc 1260
tcagaacaca acctacctgt ggtgggtaaa tggtcagagc ctcccagtca gtcccaggct 1320
gcagctgtcc aatggcaaca ggaccctcac tctattcaat gtcacaagaa atgacgcaag 1380
agcctatgta tgtggaatcc agaactcagt gagtgc aaac cgcagtgacc cagtaccct 1440
ggatgtcctc tatgggccgg acacccccat catttcccc ccagactcgt cttacctttc 1500
gggagcgaac ctcaacctct cctgccactc ggctctaac ccatccccgc agtattcttg 1560
gcgtatcaat gggataccgc agcaacacac acaagtctc tttatcgcca aaatcacgcc 1620
aaataataac gggacctatg cctgttttgt ctctaacttg gctactggcc gcaataattc 1680
catagtcaag agcatcacag tctctgcac trgaacttct cctgggtctc cagctggggc 1740
cactgtcggc atcatgattg gagtgtggt tggggttgct ctgatatagc agccctggtg 1800
tagtttcttc atttcaggaa gactgacagt tgttttgctt cttccttaaa gcatttgcaa 1860
cagctacagt ctaaaattgc ttctttacca aggatattta cagaaaagac tctgaccaga 1920
gatcgagacc atcctagcca aca 1943

```

<210> 585

<211> 577

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (78)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (80)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (81)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (82)

<223> n equals a,t,g, or c

411

<400> 585

```

caccgggtccg gaattcccgg gtcgacccac gcgtccgggc tctgaaggag gttttcaagg 60
agtatttgat tgaactgn gnngttgcaac actttcaagg gaacatgatg gatttcttag 120
ctttcaagga gagactgtat ggaccattac aagcatatct taggcagaat gatttggaca 180
ttgaagaaga ggaagaggag cactttgaag tcattaatga tgaggtaaag gttgtggcca 240
gaaagcacgg gcagcctggg actcctgttg ccatagcaac ccasstaccg ccgaggactt 300
ctgcggcctt tccagcccag cagcagccgc tccaggctact ttctgatggc tccacagtgc 360
agctccccag actttcctca ctccgatttg aggactcgat gtgctgaggc akgacccaga 420
gggggtcccaa gagcctgtcc tcttttggtc aaaatacatc ttgaaacgtc tttgtgaagg 480
ctcttagttt taatgcatgg atgctgttat ttttcctac tgttactgaa attaaaaagt 540
gtttgtctct gaaaaaaaaa aaaaaaaaaa aaaaaaa 577

```

<210> 586

<211> 1240

<212> DNA

<213> Homo sapiens

<400> 586

```

gtcgtgccc cggccccgcc cgcgtcagct ctgcgcgggtg attcactccc tccttcgccc 60
cggggccccc ttcccgccca gacggcgggc aagacagctg ggtgtacagc gtcctcgaaa 120
ccacgagcaa gtgagcagat cctccgaggc accagggaact ccagcccatg ccatggcgga 180
ttctgagcgc ctctcggtc ctggctgctg ggccgcctgc accaacttct cgcgcactcg 240
aaagggaatc ctctgtttg ctgagattat attatgcctg gtgatcctga tctgcttcag 300
tgctccaca ccaggctact cctccctgtc ggtgattgag atgatcctg ctgctatttt 360
ctttgttgtc tacatgtgtg acctgcacac caagatacca ttcataact ggccctggag 420
tgatttcttc cgaacctca tagcggcaat cctctacctg atcacctcca ttgttgctct 480
tggtgagaga ggaaaccact ccaaaatcgt cgcaggggta ctgggcctaa tcgctacgtg 540
cctctttggc tatgatgcct atgtcacctt ccccgctcgg cagccaagac atacagcagc 600
ccccactgac cccgcagatg gcccggtgta ggccgaactt cctcatttct ctctgcaatc 660
tgcaataaac tcctccattg aaataactcc tccccacccc aacaacaaca ttcccagcag 720
accaactccc accccctctt tgaggtaaaa gtgcctttat tgggagactt ttgtcttcca 780
gcctgccaat caaccctcct ggggtgtggc accatatgtg tgtgcctagg tcctccttct 840
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tgagggaagt ggggagttag atttcagagt ccaggcccta ggttgggacc cactccaaat 960
aatctcctcg gtgtgggtgg tggttctata gagggataaa tgaataataa acattgttaa 1020
aatatacgat aatgaataaa gtaatccttt catcaaatgt gggtaaattt caagcatcag 1080
gagggggaaa tggagtggaa acagctgggg caaggaggca aagaagccag gcctgtttta 1140
caacaaatat taaattactt caataatata aacgagaggc ccggtgcggt ggctcatgcc 1200
tgtaattccc agtccttttg gaggctgcgg gaggattgct 1240

```

<210> 587

<211> 875

<212> DNA

<213> Homo sapiens

<400> 587

```

ggaarggttg taggaactaa tcacgtttca gcttggtgtg cgggctgtga gtcacggttg 60
cactgcgatt atgtaagcac gcaggaatag gtggcatgac atatatgctg ccagcagcca 120
cgggcctcgc ccttcagagt caccactact ttttaagcct ttttttggat acaagtttct 180
ttgggttcat ctttgraatg raaatgraag catgattgca gaataggcag amcaggaatt 240

```

412

```

atccatcaat cagagagamc ccagaccttt aagagaagct ggaattagaa tatggaattc 300
ctgagccttg agctggcata gccgagccct ggtttatgct cttcctgcct ccctcctttt 360
ttcctctctg cctgtgtgct ccacttcctc tcctgagact cccccaaggt agcatcactc 420
ccaccaggag ccttaggcag gaaaagtaag gcccagagaa gggactgtcc ctggggacgt 480
gcaatgcctc ccacagtatt tctgtagggg aaaggataga aactcacttc ttgggttcct 600
ccaatcacca tgcacatgtc agtccttcag ctatcaatgc aaaggaaacc cagaactgag 660
atctgagctt tctcaccatc tccatggcca gatatctcca ctgccaaagg gttcattccg 720
cctctgggtt tatctctttc ttcattgttc ttctctggcag tgctctgttg aagcttacct 780
tcccatctgt gtttgcatcc actccctaaa aactacaaga caaaaaaaaaa aaaaaaaaaa 840
tcgagggggg gcccggtacc caattcgggc tatag 875

```

<210> 588

<211> 1517

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (144)

<223> n equals a,t,g, or c

<400> 588

```

gttgagtctt tgggtgtgct tttaatgggc tctctgcctc ttccttaggt gtcaggctgc 60
tctacctgtt tctagacgct cttcctttcc cccttccaaa cctcttttct tccttgctgc 120
tttctatctt tctgtggcta gganatcagg taatcaagcc tgtgttttct gtaatgagta 180
agtgggttgc cagcgaggtc tctgtggatg ctctgtgag tcaagtgcac gagctttagt 240
gcatggactt tgggtcttg gttcccacag cttatatgtt ttgggggctg ctttcttgct 300
ctttaccac attctgtgct atgagtgtgc cgggtaggtg gcctcctgcc cgatggaggc 360
tgagcatctt ggcagtgtcc atcatgcctt gcgtgtgcct ggctcttttg ctgcagatac 420
tatggaccg cagctcatcc cctgctcacc acctggcctc tccttttctc tgtgtgcaga 480
tctggcagtg tgggtgggtt ctggaaacac acctatgttc ccatgttggc catgttttcc 540
ccaagcaagc tcctactcc cgcaacaagg ctctggccaa cagtgttcgt gcagctgaag 600
tatggatgga tgaatttaaa gagctctact accatcgcaa ccccgctgcc cgcttggaac 660
cttttgggga tgtgacagag aggaagcagc tccgggacaa gctccagtgt aaagacttca 720
agtggttctt ggagactgtg tatccagaac tgcattgtcc tgaggacagg cctggcttct 780
tcgggatgct ccagaacaaa ggactaacag actactgctt tgactataac cctcccgatg 840
aaaaccagat tgtgggacac caggtcattc tgtacctctg tcatgggatg ggccagaatc 900
agtttttctg gtacacgtcc cagaaagaaa tacgctataa caccacaccag cctgagggct 960
gcattgctgt ggaagcagga atggataccc ttatcatgca tctctgcgaa gaaactgccc 1020
cagagaatca gaagttcatc ttgcaggagg atggatcttt atttcacgaa cagtccaaga 1080
aatgtgtcca ggctgcgagg aaggagtcca gtgacagttt cgttccactc ttacgagact 1140
gcaccaactc ggatcatcag aaatggttct tcaaagagcg catgttatga agcctcgtgt 1200
atcaaggagc ccacgaagg agactgtgga gccaggactc tgcccaacaa agacttagct 1260
aagcagtgc cagaaccac caaaaactag gctgcattgc tttgaagagg caatcatttt 1320
gccatttgtg aaagtgtgtg tggatttagt aaaaatgtga ataagctttg tacttatttt 1380
gagaactttt taaatgttcc aaaataccct attttcaaag ggtaatcgta agatgttaac 1440
ccttggtatt tagaaaatta aaaccttata atatttttct awmaaaaaaa aaaaaaaaaa 1500
aagggcgccc gctctag 1517

```

<210> 589

413

<211> 871
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (12)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (863)
 <223> n equals a,t,g, or c

<400> 589
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 gatggcggct ccgggcgggc gtggccagtg actagaaggc gaggcgccgc gggaccatgg 120
 cggcggcggc ggacgagcgg agtccagagg acggagaaga cgaggaagag gaggagcagt 180
 tggttctggt ggaattatca ggaattattg attcaractt cctctcaaaa tgtgaaaata 240
 aatgcaaggt tttgggcatt gacactgaga ggcccattct gcaagtggac agctgtgtct 300
 ttgctgggga gtatgaagac actctaggga cctgtgttat atttgaagaa aatgttgaac 360
 atgctgatac agaaggcaat aataaaacag tgctaaaata taaatgccat acaatgaaga 420
 agctcagcat gacaagaact ctctgacag agaagaagga aggagaagaa aacatagggtg 480
 ggggtggaatg gctgcaaata aaggataatg atttctccta tcgacccaac atgatttgta 540
 actttctaca tgaaaatgaa gacgaagaag tggtagcttc agccccagat aaatctttgg 600
 aattggaaga ggaagagatt caaatgaacg acagttcaaa cctgagttgt gaacaggaga 660
 aaccaatgca cttggaaata gaagattctg gtctcttat tgatatacct tctgagacag 720
 aaggttctgt ttttatggaa actcaaatgc tgcttagaa atcactccta gatgaaatgt 780
 ttctcataat aacttgtcaa gaacttttta gagttgttac ataaaaataa ttgctgtgta 840
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa t 871

<210> 590
 <211> 1566
 <212> DNA
 <213> Homo sapiens

<400> 590
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 tagcaaactt caggagagct actttctatc caaataattt aaaaaacact tttcacctac 120
 tcctttcatg gttataacac attggcagac tttttgctgg ctctgggagc catgatttta 180
 atcacattct gcaagggtgac aaatgtcata cattccacat tgtgtggtag ccatctcttt 240
 agactcatgt gttttgggga aaggaagaag ttcttggtcg agtactatth tgaactttcc 300
 agaaccctct cacaccagag acagttcttc tctgttcagt ttccaatccc cgataatttg 360
 ctaaaataac attgtacatc caagagaggg aagaagagta tgtcagtata ttatgcagaa 420
 gatagataca gccttttcag aagatctcca ctagtttttg ttccaaaaat tcaagtttat 480
 gggagaaaac tcaattagcc accttttcac agttgtgtgg atataacatt tgggggatct 540
 ttctggactc ctacctatct gtgcatttta ccggcacctc aggaaaggag ggtgaccagg 600
 ttgtcttagc ttgtactgct tgggtgatctc tgaggacctt ctaattcagt tgtaccccag 660
 tgttccatgt atagaaaaac ttcattagaa caaactttac ttgatatgaa actcctatta 720
 acagtctttt tttgaaataa aaagtagctt gagctttctt ttaaaatcat gtatcttgat 780
 tgttgattta atgaaggatt tccttttaat gctgcttttg agcttcaagg taataggaca 840

414

```

gcaggaacct aaaatatctg ccatcatctg ccataggaaa gatacccaga gacccatcat 900
gttctctttt tgttggtaca ctgttggtg ggtataacaa ttggaaaatg aacaaactga 960
ttgattgtgc aaactacttt ttatgacaag cctaaaccct cataatgcgg cagcttaaag 1020
tgtatacata tgcactaact ttgatcaatt atattctcat atctgttagc tacacagtct 1080
cctattatct caattgctta tgtgcatatg gaatatgtta cttaaaacgt gtgcattctt 1140
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gccacgattc ttggaaatat gtcttccaag tgccatccat catcagtagg acaagtgtcg 1260
ggagtttggt tatttttttc cagtagcaac gatgggttac atggagccat gaaacctcct 1320
tctggcctcc cttgtgatta atggcatgtg tttgtaaaat ggatagctgg ggttggcaga 1380
tggttagaga agaatcgctt ttggtttaa atgtatgtgg tcccctaatg attgtgacct 1440
cattctgtaa tcaactgagc tagttccaat aaagttaagc aggtttaa atccactttgtg 1500
cctatctttt cactgacaat aaagttagct attttaaaat gcaaaaaaaaa aaaaaaaaaa 1566
aaaatt

```

<210> 591

<211> 1192

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (298)

<223> n equals a,t,g, or c

<400> 591

```

accttgagtg tccttggcaa cctagccttt gacattgatg tttttccata ggattttctt 60
catttgggtt ggaataaaaa tgcattttta ttcacaaggc acagacagat aagaatatca 120
taagcaggga agtgtctcca aaggtcagga cttatgtttt tctgttgagt gctatatgtg 180
gaggttattg caagttccct gatatgagta tggtttcgct tgctacattg tgcctattaa 240
agtaaaattt tacacaagcc tcgcatttct aagattagtg ttcccgaatg aaatgttnaa 300
gaaaacatta aaagattatc tctttttaag atggaggaaa aaaagtgaac aaagctaatt 360
aatctataat gaaaattgca caaaataaca tttcttaaca aatttaatac aattttgtgt 420
tctttgttgc tagtggtata aaacgagatt tttttccctc atttttctca ttgtagatgt 480
catctctcac atttatatca gtgaggtttg aaattctgtg tagcagttac tcagcacata 540
tgagagggca gcgaatgaat gagatttgtc atgtgcta ataaaagctgaa tttttgtaat 600
ctaaaatgat gtattttcta ctattgctgt taatttgc atgttataaat tcttaagtt 660
taatatgtta tgttcagtca ttgaaagcga ccactcattt ttttcttaa gttgatgcct 720
tttctgctgt gctagagtca gtattttgct tctggcagga gagctgcaa ctgtgtatcc 780
tcaaacagat gcaaaaagta gtgctttgca aaacgtttgt tttctgttta tctcagatta 840
acatccttta atacaagttt cttaagtgt acttgattt ctgaaaatgc ttaaaattat 900
tttatatttc cctttgggaa tttttctcta tttccagcac gctgatttga tttaaaaatg 960
taataagacc aagagttgga gtaaaggat attcattcca tgttaaaagt ggcttcata 1020
ctactgacaa atgtctgaac tattgtcgtg cccttcaaaa ctggagtttt ctaaaataat 1080
cttattttta tacttgatg ttccagcaat ttaagatata taccattgaa agggaaataa 1140
aacatttttg tttatttgaa taaataatac tcccaaaaaa aaaaaaaaaa aa 1192

```

<210> 592

<211> 401

<212> DNA

<213> Homo sapiens

415

<220>
<221> misc feature
<222> (220)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (361)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (400)
<223> n equals a,t,g, or c

<400> 592
ttatttggaa gacattattt gtggaacata atggcataac atttacatac gttcacctwc 60
tgactttgag tatgaatgtg taggttgtgt atatgtgtga atatataac accacgatgt 120
cattctaagt gtttggaat aactgttcat acatgtrgtt taccttcttc cttggaatta 180
ctatcttgta atatggcatt aaagaattat cccatctctn aagtcctttg cctgggaaac 240
atggtgaact ggaggatcct tacacattct gtgtgaccag ctattaaaca gaatgaggac 300
taggtctctc tgtcactgac ttgggaaggt aatgaaatgt tcaggcaacc agtattgaca 360
ncttgacgct tttgccccgg ttttgtttcc caggtgattn a 401

<210> 593
<211> 654
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (58)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (71)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (545)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (564)
<223> n equals a,t,g, or c

<220>
<221> misc feature

416

<222> (592)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (593)

<223> n equals a,t,g, or c

<400> 593

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gtccggctta ccttttataa cttgaatggt aaggaatgga ccatgggcta ctactggnc 60
ttagtgccat ntaaccagcg ataataaaat tctctattag tctgttaatt tatgaccatg 120
atctcggaat ggaaaaagat catttccaga gtgtgcgaaa taatagtctt taaccatgta 180
attaaatatg tgtgttttatt gtcaaataag gatttgtttt aaaggtgatt cttggggttg 240
aagacatttg ttaattcatg gtctgtacag aaatgaagct gggtgcaata ccaatctaga 300
gagtccaagc tggcgaaacta ttaagctggt taaagatcac ccttggcctg gcacagtgg 360
tcacacctgt aatcccagca ctttgggagg cctaggcagg cagactgagc tcaggagctt 420
gagaccagcc tgggcaacat ggcaaaaacc cacctctaca aaaagtacaa aaattagtcg 480
ggcgtgatgg caggcatctg tagtcccagc tacttgggaa gctgaagtgg gaggatcacc 540
tgganctctg gatgtggaag ctgncatgag ccatgatcgt gccactacac tnnagcctgg 600
gtgacagaat gagatcctgt ctcaaaaaaa aaaaaaaatc acccttaaata caac 654

```

<210> 594

<211> 682

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (673)

<223> n equals a,t,g, or c

<400> 594

```

tggaaggagc agcagttttg caaggtaagc agggcagaga cacagcccat ggcccctcat 60
tgccctgctg gtaagggctg atggarctcc ccgcagcgtg gttcctgcct ggktgacaga 120
ggctcctktg gccactttag aartgcggtt tactcctcat gccgagatgg accttgggca 180
gctcagttca caagatgttg gtcaggcgtc atttaaatat tttcagtcag cagaggaagc 240
aaagcgtgcc attgaggctg tgctgtcagc ggatcctcgg tctgtgtacc gccggaagct 300
ttgccaggac cgccttttct actttactgt agacatagcg catgtcactt gctggtttgg 360
tgatggcttt gcagagggtg tgaggatcaa gccggcttct gagcctgttc atatgactgg 420
ccctgtgggg tccttggtgt ctctagggtc ttaaggagcc tccctcatgt cttaaggta 480
gcatcattga tctttggatg tggcttttgg attttctgaa caagctaata ttgtgtcrag 540
aagcaacact ttgtgatctc atggctttga ttgatttggg ctgttcaaaa tgtttatattg 600
aaaaacgtat acattaataa acttaacaaa gagatataaa aaaaaaaraa aaaaacccga 660
ggggggggccc ggnacccaat tc 682

```

<210> 595

<211> 1430

<212> DNA

<213> Homo sapiens

<400> 595

417

```

cagtctcagt tggagggctg atartaaacc ttattggtat ctgtgccttt agccatgccc 60
atagccatgc ccatggagct tctcaaggaa gctgycactc atctgatcac agccattcac 120
aycatatgca tggacacagt gaccatgggc atgggtcacag ccacggatct gcgggtggag 180
gcatgaatgc taacatgagg ggtgtatttc tacatgtttt ggcagataca cttggcagca 240
ttgggtgtgat cgtatccaca gttcttatag agcagtttgg atggttcacg gctgaccac 300
tctgttctct ttttattgct atattaatat ttctcagtgt tgttccactg attaaagatg 360
cctgccaggt tctactcctg agattgccac cagaatatga aaaagaacta catattgctt 420
tagaaaagat acagaaaatt gaaggattaa tatcataccg agaccctcat ttttggcgctc 480
attctgctag tattgtggca ggaacaattc atatacaggt gacatctgat gtgctagaac 540
aaagaatagt acagcagggt acaggaatac ttaaagatgc tggagtaaac aatttaacaa 600
ttcaagtgga aaaggaggca tactttcaac atatgtctgg cctaagtact ggatttcatg 660
atgttctggc tatgacaaaa caaatggaat ccatgaaata ctgcaaagat ggtacttaca 720
tcatgtgaga taactcaaga attacccttg gagaataaac aatgaagatt aaatgactca 780
gtatttgtaa tattgccaga aggataaaaa ttacacatta actgtacaga aacagagttc 840
cctactactg gatcaaggaa tctttcttga aggaaattta aatacagaat gaaacattaa 900
tggtaaaagt ggagtaatta tttaaattat gtgtataaaa ggaatcaaat tttgagtaaa 960
catgatgtat tacatcatct tcaaaaatag atatgatgga ttctagtga gaccaaatt 1020
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taciaagacc caaatgaaaa attttttagtc cattttttgc atagcctaaa gataaaatag 1140
gaataaaagt tctatattta tggattttct gtatataaaa ctggtttcta attataactt 1200
aagtccatta agtaaaatct gtattgccac tttaaatgta aactaaatta tttgggagaa 1260
acttcaacca ctgatatgag ataagcaatg agaataggga agtgtataac atcacagttt 1320
ttgatgtatt acaaaaatca accactctat aaaataaatt ttttttactt ttggtaatat 1380
ttgcaaatga ataattaatt tattagggta aagaacttat actaagttgt 1430

```

<210> 596

<211> 1597

<212> DNA

<213> Homo sapiens

<400> 596

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gctagtcctt cggcgagcga gcaccttcga cgcggteccg ggacccctc gtcgctgtcc 60
tcccgcgcg gacccgcgtg cccaggect cgcgctgcc ggccggctcc tcgtgtccca 120
ctcccggcgc acgcccctcc gcgagtcctg ggcccctccc gcgcccctct tctcggcgcg 180
cgcgcagcat ggcgcccccg caggtcctcg cgttcgggt tctgcttgcc gcggcgacgg 240
cgacttttgc cgcagctcag gaagaatgtg tctgtgaaaa ctacaagctg gccgtaaaact 300
gctttgtgaa taataatcgt caatgccagt gtacttcagt tgggtgcacaa aatactgtca 360
tttgcacaaa gctggctgcc aaatgtttgg tgatgaaggc agaaatgaat ggctcaaaac 420
ttggggagaag agcaaaacct gaaggggccc tccagaacaa tgatgggctt tatgatcctg 480
actgcgatga gagcgggctc ttttaaggcca agcagtgcaa cggcacctcc aygtgctggt 540
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gagtgagaac ctactggatc atcattgaac taaaacacaa agcaagagaa aaaccttatg 660
atagtaaaag ttgcggact gcacttcaga aggagatcac aacgcgttat caactggatc 720
caaaatttat cacgagtatt ttgtatgaga ataatgttat cactattgat ctggttcaaa 780
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aagatgttaa aggtgaatcc ttgtttcatt ctaagaaaat ggacctgaca gtaaatgggg 900
aacaactgga tctggatcct ggtcaaaact taatttatta tgttgatgaa aaagcacctg 960
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cagttgttgc tggaattgtt gtgctgggtt tttccagaaa gaagagaatg gcaaagtatg 1080
agaaggctga gataaaggag atgggtgaga tgcataggga actcaatgca taactatata 1140
atltgaagat tatagaagaa gggaaatagc aaatggacac aaattacaaa tgtgtgtgcg 1200

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418

```

tgggacgaag acatctttga aggtcatgag tttgttagtt taacatcata tatttgtaat 1260
agtgaaacct gtactcaaaa tataagcagc ttgaaactgg ctttaccaat cttgaaattt 1320
gaccacaagt gtcttatata tgcagatcta atgtaaaatc cagaacttgg actccatcgt 1380
taaaattatt tatgtgtaac attcaaagt gtgcattaaa tatgcttcca cagtaaaatc 1440
tgaaaaactg atttgtgatt gaaagctgcc tttctattta cttgagtctt gtacatacat 1500
acttttttat gagctatgaa ataaaacatt ttaaactgaa aaaaaaaaaa aaaaaaaaaa 1560
agtcgacgcc aggaatttag tagtagtagt aggcggc 1597

```

<210> 597

<211> 602

<212> DNA

<213> Homo sapiens

<400> 597

```

ggcaggggtg gagccctcat ggagaacctc tgtaggggca gtgcagaaga gaaatgtgag 60
gtcagagcct tcacacacag tccccactga ggactgcct agtggagctg tgagaagaga 120
gccactattc tccagatccc agaatggtag atcaaccaac agcttgact gtacatctgg 180
aaaagctgca gacactcaat gccagcctat gaaagcagct tggaatgggg ctgtaccctg 240
caaaggcaca ggggcagagc tgccaagacc atgagagtct acttcttcca ccagtgtgac 300
ctgaatgtga gacatagagt caaaggagat tattttggag ctgtaaaatt caatgaatac 360
cctgctggat tctggacttg tcattggctt ttagccctt tgttttgtcc aattctccta 420
tatggaatgg gagcatcctc atccaatgcc tgtaccctca ttgtgtctta gaagtaatta 480
acttgctttt gatatttatag gccatgctaa tcagcattca gttctagatt ccaattttatt 540
ctcagtgtgc ctgtataact tttctttcta tatatatata attaaatttc tattacttat 600
tt 602

```

<210> 598

<211> 432

<212> DNA

<213> Homo sapiens

<400> 598

```

gctcgtgccg aattggtgcg gcgtcaggtg cgcccgccag gtgagcgcgc tccctggcac 60
cgttggcccc cggaggggtcg ggcccagttg cggcgagcgg attggtttat cttggaagct 120
aaagggcatt gtcacacctg aagatcagct gaccattgac aatcagccat gtcacccagg 180
cctcttgaaa gtccacctcc ttacaggcct gatgaattca aaccgaatca ttatgcacca 240
agcaatgaca tatatggtgg agagatgcat gttcgaccaa tgctctctca gccagcctac 300
tctttttacc cagaagatga aattcttcac ttctacaaat ggacctctcc tccaggagtg 360
attcggatcc tgtctatgct cattattgtg atgtgcattg ccatctttgc ctgtgtggcc 420
tcacgcttgc ct 432

```

<210> 599

<211> 1319

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (591)

<223> n equals a,t,g, or c

419

<400> 599

```
tgtgtgttca caaccaaattg ttgatgccct tatctactga taatatacctc tcaatgttca 60
ctgaggcata gaaattatatt cagagtagaa attgcagcat gaggataaac tcacctcttt 120
gttctgaaaa tagaacttta tcactatgct ttccgggtggt ttccctctttt acaatcgaaa 180
tcttgtgcct cccaagtgc a ttggaaaatg acaaaagcct gtctctccaa attcctatatt 240
aacagtttga tttttttttt ttaatcacca tctttcaaat cttagctcaa ctctcaccaa 300
gtgaaaattg gctacttggg agaaaagttaa ctttctatgg tgggatgggtg aaggatgagg 360
gacagtttac ataggaaaag aaaaaaaaaa gtctaaagtc catgttgaaa aaccacacta 420
ccacttatatt tctgctaacc cttaaattatt tttgcgtata cgcttgaggt tatagtctgt 480
gcctagacct aaaatgcacc agcggggggg attttaaaaa atccttcaaa ataccagttt 540
tttcccaaca agtacaattg ttcttgtgcc ttctgtggct ttcgatttca nctttttkac 600
tttwtttcca attactacag ctgcaataaa cactagattt tttttctggc tgtttgacat 660
aacgttgata gctatgcata tkttgtgtct ttttaaaaca aagcgggaga atacgttttt 720
gaagaagaga attttttagaa cagtttgata ccgcaaatta ttttctcctc aattgtttga 780
gcagcattcg agttttgaaa attcttgtag aagccaattt tttgtaactg tggtgcaaat 840
cttgtgtttt cttagcctaa tgaaaagtag tatagaagca atatttcata ccatgtgcta 900
tatatgtgtg cgcagatgtg tgaacataaa atcacatata cacatatata cacatgtaaa 960
aatatacata tatatatatg cgtgtgaagt ggaaagctta ctttttccta tctagattta 1020
agaacctatt ttagacattt gttatgtttt gtgaaaagaa tgttctattt gcaacaaaac 1080
atttaattct tactgtatct ctggctgttt aatgaggacg tttcacatta aatggtaaaa 1140
cacatggaag atgttagaat gtagtaatta ttttaagtaa cgttcaccca catattcctg 1200
aagtttgctt tgtgcctccg agtattatatt aattaaagaa gtgttttatg tttgcagaat 1260
ctttgtcact gtactagga tgtgggtgaa tatcatttaa aaaaatttaa aacaacaaa 1319
```

<210> 600

<211> 973

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (746)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (942)

<223> n equals a,t,g, or c

<400> 600

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ctcacctccg agagctagac tttggccagg catggctaaa accactgggtt aacgatgtga 60
cagttatgat cttggagatt ggaaatcttt cttccacatt agagttcttt accttaattc 120
cttattctga aaaattgtaa gattttatga aggtttgaat actgaagcac agttctgctt 180
tcaaaaatta aaattcaaac ttgaaaaagc tgtttaacct atggaagata tcatttagta 240
agatgtaaaa gattttttta atctacactt cagtttatac atctttatca ttatcaatac 300
tatataagtt actgtgagca ttttagagaa ttccataaag gtactatgag tgtgtctgta 360
tgtgtgtgta tatatagcat tgtatttaat catagactaa atttaatttg atatagaaat 420
actactttac ttgtacatta aggtcataat ttctgtgga ctcttttata ttttaattaat 480
ggggattata gtcttccttc ataaatgcat ttaaacctga aattgaacac cagtgttttt 540
ctttttctac ttatgggaag ttgtctgctt ccccttttag agaaaacagt atttttatat 600
tttgttaaaa tattaaactac tttatgccta cacactatgc tgtagatact gatcataatt 660
```

420

```

cttgggtgtt cacaaacact cctagwgcct cttttttggc ccgttgaaag tgttggtatt 720
actactttca ctacagagcc tttggnccct taataatgct gaggtgggct gatccttccc 780
mtttctgtcy tcgggtcatt ctgggtaggg tcttctcctc cactgtcaag gtaaggcaat 840
cagggctccgt gacaggggat tgggacatat ggaacaaatt aaggtgggat acacacagtg 900
aggaaagggtt acatggcatt ctatggggaa ccaactactg tncaataaca tctgatgtta 960
acatggcaca tta                                     973

```

<210> 601

<211> 1473

<212> DNA

<213> Homo sapiens

<400> 601

```

ttgagactga ctactgagtc taccttttta atcaagccta acatgaatgg gtcceaaaaa 60
gtaatgaatg taattgtact ttttgatgtg cctctgcaact tggcttggtg agtcatcata 120
aatagctgtt aaatatgtga ctttacagat tttgatatgt tcagattgta aaaaatgaat 180
agtttatttc attaattgat gggcagtcac gaatctccct cccttcagta gggctgacac 240
ttaggagtta ggtcatgggt gtgggtactt ggcattggcta atcagatttt gttctggtca 300
gaatttgccc aagatcaata cccagcagaa actggagtta ggctataaaa aaccattcat 360
gtttccgagt gatcatttca gtcagcgatt catgtttttac agtgtttagt tgttgattat 420
tagaaaaagt aatattttct tccctttatg attacatcat tataaatcaa gtccttccat 480
gaacacattt aaggtgtgtg gagatgagat gtctgaatcc atttggggat gggctgcatt 540
tttggggaac tctatgcctg tccagtgaag agtgcctaaa acattaatta tagatcaaag 600
atgttctgtt gagggacaaa gcttgatggg catcaaacac aaggctttgt aaaaatacga 660
ccacctattc cacttactgg atctgtcagg tgtgtaaaac ttctctcgcc agttcatcat 720
gcttccatga gccctcagga ctgggatttg agccttctct gctctttatc ccttggggca 780
gacatggaac catctctgag ggaccagggt gatgctgaag ctcacccagt cagggcccct 840
ctcctagctc cttttacact gaaattaatc tgaaagcttt catagccaag gctttgctag 900
gtgctattat tccagctggc caaagagaag tcttgggcca gattgggatt ctcaatggat 960
tttatagaca taattccctt gcaaacttaa aaaaataaat aacccttact ttataggact 1020
aattgtttga attgtatctt tctctgtatg ttaaaccaga tttaaaacta ttttataacc 1080
acaatatgta atcagagcaa tatagtgttt tcagatatat accttgtttt ataccttatg 1140
taggtgtcct acataagggg ggcattgcca ctggctgtgg taaaatttaa tcctcattgc 1200
tttgggagtg acttaaggcc ttttgaagtg gagcttttgc actttatact ttttctgtga 1260
actatgataa ctatatattg tattaaagct gtaagtggca ttttcagcaa atgaatatgt 1320
acatgtttgt gtctatttcc aaaatgattt ctgaactatc tgcagtgaaa atgtatctga 1380
tggattgtag agcaaagcac attgcctaaa ttcatttgtt aatgaattgg gtaccattgt 1440
tattaaaaat gcgtaaagta aaaaaaaaaa aaa                                     1473

```

<210> 602

<211> 481

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (480)

<223> n equals a,t,g, or c

<220>

<221> misc feature

421

<222> (481)

<223> n equals a,t,g, or c

<400> 602

```

gccttcacat tgggtcttcg gggcttaaaa gcatatcatt cctgattctg cagctgggtc 60
tctctccaag cactagcaaa accctgccct aggagccccc agactctgag agcccatgac 120
caaaaagaaa aggaaagcca agttggggaa gaacagggcc cccaactcca cagccctcca 180
ctctssccag agggcccacc ctgggctgcc tggaaacccc taaagttagc acccccgcaa 240
cacagtagtg gggcagttcc tggcagcgcc tgcagcccat gggctggctc tgtaccgca 300
gccccgcaa gcgtctgtta tcttatttac tggaatctgc acagccaggc tctagctcac 360
cggtgactaa ggagctgcag ccattattac caggcagatg gcagactccc taaaagcaga 420
cattaacaa taaaatgcca ccacatacct tgcccacaaa ataaatcaa aacaaaccan 480
n 481

```

<210> 603

<211> 1667

<212> DNA

<213> Homo sapiens

<400> 603

```

gggaattatt tcacaatact gatagtactg ggaattgtka aataattcct ctgaaagata 60
agaatcactg gcttctatgc gcttcttttc tctcatcatc atgttctttt accccagttt 120
ccttacattt ttttaaattg tttcagagtt tgtttttttt ttagtttaga ttgtgaggca 180
attattaaat caaaattaat tcatccaata cccctttact agaagtttta ctagaaaatg 240
tattacattt tattttttct taatccagtt ctgcaaaaat gacctataaa tttattcatg 300
tacaattttg gttacttgaa ttgttaaaga aaacattgtt tttgactatg ggagtcaact 360
caacatggca gaaccatttt tgagatgatg atacaacagg tagtgaaaca gcttaagaat 420
tccaaaaaaa aaaaaaaaaa aaaaaaaaaa gmaaaactggg tttgggcttt gctttaggta 480
tactggatt agaagaggtt taacattagc taaaactgct ttgagttgtt tggatgatta 540
agagattgcc atttttatct tggagaagact agtggtaaaa catccaagag cactaggatt 600
gtgatacaga atttgtgagg tttggtggat ccacgcccct ctccccact ttcccatgat 660
gaaatatcac taataaatcc tgtatattta gatattatgc tagccatgta atcagattta 720
tttaattggg tggggcaggt gtgtatttac tttagaaaaa atgaaaaaga caagatttat 780
gagaaatatt tgaaggcagt acactctggc caactgttac cagttgggtat ttctacaagt 840
tcagaatatt ttaaacctga tttactagac ctgggaattt tcaacatggt ctaattattt 900
actcaaagac atagatgtga aaatttttag caaccttcta aatctttttc accatggatg 960
aaactataac ttaaagaata atacttagaa gggttaattg gaaatcagag tttgaaataa 1020
aacttgacc actttgtata cactcttctc acttgacatt ttagctatat aatatgtact 1080
ttgagtataa catcaagctt taacaaatat ttaaagacaa aaaaatcacg tcagtaaaat 1140
actaaaaggc tcatttttat atttgtttta gatgttttaa atagttgcaa tggattaaaa 1200
atgatgattt aaaatgttgc ttgtaataca gttttgcctg ctaaattctc cacattttgt 1260
aacctgtttt atttcttttg gtgtaaagcg tttttgctta gtattgtgat attgtatatg 1320
ttttgtccca gttgtatagt aatgtttcag tccatcatcc agctttggct gctgaaatca 1380
tacagctgtg aagacttgcc tttgtttctg ttagactgct tttcagttct gtattgagta 1440
tcttaagtac tgtagaaaag atgtcacttc ttcctttaag gctgttttgt aatatatata 1500
aggactggaa ttgtgttttt aaagaaaagc attcaagtat gacaatatac tatctgtgtt 1560
ttcaccattc aaagtgtgtt ttagtagttg aaacttaaac tatttaatgt catttaataa 1620
agtgaccaa atgtgaaaaa aaaaaaaaaa raraaaaaaa aaaaaaa 1667

```

<210> 604

<211> 1193

422

<212> DNA

<213> Homo sapiens

<400> 604

```
ctaacgtatt catgccttgt atttgtacag cattaatctg gtaattgatt attttaatgt 60
aaccttgcta aaggagtgat ttctatttcc tttcttaaag aggaggaaca agaagatgag 120
gaagaaatcg atgttggttc tgtggaaaag aggcaggctc ctggcaaaag gtcagagtct 180
ggatcacctt ctgctggagg ccacagcaaa cctcctcaca gccactgggt cctcaagagg 240
tgccacgtct ccacacatca gcacaactac gcagcgcctc cctccactcg gaaggactat 300
cctgctgcca agaggggtcaa gttggacagt gtcagagtcc tgagacagat cagcaacaac 360
cgaaaatgca ccagccccag gtcctcggac accgaggaga atgtcaagag gcgaacacac 420
aacgtcttgg agcgccagag gaggaacgag ctaaaacgga gcttttttgc cctgcgtgac 480
cagatcccg agttggaaaa caatgaaaag gcccccaagg tagttatcct taaaaaagcc 540
acagcataca tctgttccgt ccaagcagag gagcaaaagc tcatttctga agaggacttg 600
ttgcggaaac gacgagaaca gttgaaacac aaacttgaac agctacggaa ctcttggtgcg 660
taaggaaaag taaggaaaac gattccttct aacagaaatg tcttgagcaa tcacctatga 720
acttgtttca aatgcatgat caaatgcaac ctcaaacct tggctgagtc ttgagactga 780
aagatttagc cataatgtaa actgcctcaa attggacttt gggcataaaa gaactttttt 840
atgcttacca tctttttttt ttctttaaca gatttgtatt taagaattgt ttttaaaaaa 900
ttttaagatt tacacaatgt ttctctgtaa atattgccat taaatgtaaa taactttaat 960
aaaacgttta tagcagttac acagaatttc aatcctagta tatagtacct agtattatag 1020
gtactataaa ccctaatttt ttttatttaa gtacattttg ctttttaaaag ttgatttttt 1080
tctattgttt ttagaaaaaa taaaataact ggcaaatata tcattgagcc aaatcttaaa 1140
aaaaaaaaa aaaaggtcga gccggccggc taattagtag tagtaggcgc cgc 1193
```

<210> 605

<211> 438

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (386)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (430)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (438)

<223> n equals a,t,g, or c

<400> 605

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aatgccaaaa gtacttcccc tgtttccaca agctcgttta catcctcagc ccttgagaag 60
cccagtcagg aagcataacc tgatagcttg ggctgatgca atmacagaaa ctctggcctg 120
ctgtagcttt tgttctgctt aaagtgcagg cagagcagag cagagcagta attggctgtg 180
aatgaaaggg gattgtcaga atgagcctaa gttccggwtc taccaccgca gtttcgtatt 240
tgggccctgt tttaagccag ggtggctggg tgggtaaggt catgtgcgac ctcaggaggc 300
```

423

tgtcttgtca cctccctcat gtcaatagga agggaggtat tctccctcct ccagaatata 360
 caggataatc tgtcttgcct gctaanagca ttcacctttg acctttgcat tctttgggtc 420
 tggagatgtn tatgatcn 438

<210> 606
 <211> 2674
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (75)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (206)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (1782)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (1923)
 <223> n equals a,t,g, or c

<400> 606
 gttcgscgc acagcagccc gagcgccccc ttccrgagc tcccctccgg agctgggac 60
 caggcgcgta gmgnatccc aggatcctgg gtgctgtctg ggcccgtcc ccaccatgac 120
 ctccctgggg cctggacccc ggttcctgct gctgctgccg ctgctgctgc cccctgcggc 180
 ctacagctcc gaccggcccc ggggcngcag acccggtcaa ccagagaag ctgctggtga 240
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 tcaactacac tgtgcggacc ctgggcctgg gagaggagtg gcgagggggt gatgtggctc 360
 gaacagttgg tggaggacag aaggtccggg gggttaaagaa ggaaatggag aaatacgtg 420
 accgggagga tatgatcatc atgtttgtgg atagctacga cgtgattctg gccggcagcc 480
 ccacagagct gctgaagaag ttcgtccaga gtggcagccg cctgctcttc tctgcagaga 540
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 caggactgag ggagaaactc agccttaatc tggatcataa gtctcgatc tttcagaacc 780
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 tcaactacct gggaaactac gtcccaatg gctggactcc tgaggagggc tgtggcttct 960
 gcaaccagga cggaggaca ctcccgggg ggcagcctcc cccccgggtg tttctggccg 1020
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 actatcccc cgacagggtc accttttcc tgcacaacaa cgaggtcttc catgaacccc 1140
 acatcgctga ctctggccg cagctccagg accacttctc agctgtgaag ctcgtggggc 1200
 cggaggaggc tctgagccca ggcgaggcca gggacatggc catggacctg tctcggcagg 1260

424

```

accccgagtg tgagttctac ttcagcctgg acgccgacgc tgtcctcacc aacctgcaga 1320
ccctgcgtat cctcattgag gagaacagga aggtgatcgc ccccatgctg tcccgccacg 1380
gcaagctgtg gtccaacttc tggggcgccc tgagccccga tgagtactac gcccgtccg 1440
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cccaggccta tgtgatccgg ggtgataccc tgcggatgga gctgccccag agggatgtgt 1560
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cagagatgga gcaytacggc cagtggtcag gcggccggca tgaggattca aggctggctg 1920
gangctacga gaatgtgccc accgtggaca tccacatgaa gcaggtgggg tacgaggacc 1980
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cgtctctgcg gccacaccac gactcatcca ccttcacct caacgttgcc ctcaaccaca 2160
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cctctctcct ccgccacag gggttcgtgg gcacagggct tctggggact ccccgctga 2580
taaattatta atgttccgca gtctcactct gaataaagga cagtttgtaa aaaaaaaaaa 2640
aaaaagggcg rccgctcgcg atctagaact agtc 2674

```

<210> 607

<211> 1609

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1593)

<223> n equals a,t,g, or c

<400> 607

```

cgggtcgacc cacgcgtccg cggacgcgtg ggtgtcgatg aaatcaagag tgtgatgttc 60
tagttatttt tttttatata tttttttaa tgttcaatat tcaactattg aaacaaatgt 120
acatctgtga actagctaaa atcatcttat gtaccactaa tatgcccagc acattttgtg 180
aaacagtcct gatttggcct ccaagggtat ttattgaact accagcagta tctaggagac 240
cacgaaggaa taccacgaag gaatttatgc tccagtgcct gccataattt gtctgagaag 300
gaatctgtta aataaaagct tttatcctct aacctttacc ttcacagac cttataaaag 360
gtcaaatggt gatcttaagt ttttttagtca caaatcttac ttattcagta ttagtgcgaa 420
gagtagaata ctttcaagta agcctaaact tacatgaaam caaattacat aaatctagct 480
ctgagaatag gaaattagtg acaagatcaa tctgtaagat gttgagcact tatctgaagt 540
aaatgggtaa tgagtttcac atcttataaa tacaagttag catgtgtttt ctcaagagtc 600
caagggtttt cattattgga ctacagcttt aatcttctaa atgttattcc ccaagattaa 660
agagcatctc aagttagatc accaaagatc aaaagctaaa accagaagta tttttgtcat 720
tgtgggtggt gtagtggtac taattgccta gattttttaa gggaaacatt tttttcactg 780
ggttgtttcg ttgaaaaaaa tagaagcaga aacttgccca aagtcacagt ggtcaaactg 840
gaaattgcac caaaacttgg catactggtt ctgaaatcca tagtttttagc cttatgtat 900

```

426

<400> 609

```

acgcccgcag gtaccggtcc ggaattcccg ggtcgaccca cgcgtccgaa ggaagaaggn 60
gggaaacctc aaatgaattc tgaaggggag ataccttccc tgccatcagg cagccaatct 120
gcaaaaccag taagccagcc caggaaatca acccagccag atgtttgtgc ctctcctcaa 180
gaaaagccac tcaggactct gtttcaccaa cctgaggaag agatagaaga tgggtggactc 240
ttcattccaa tggaagacaa gacaatgaag aaagtgagaa aag 283

```

<210> 610

<211> 498

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (11)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (411)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (417)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (464)

<223> n equals a,t,g, or c

<400> 610

```

aaagcccaac ncccccgtaa acccagaatc tcccatatgg taacctgtgt gatgctccgg 60
attctctctcg ccagtggaag gcatcaaggg aagatagtggt tttatttagt cctattcgat 120
cctctgcttt tagtcctctt ggaggctgta ctccagctga atgtttttgc caaacagata 180
ttggtggaga taggattcat gaaaatcatg attctgttta ttacacctat gaagactatg 240
caaaaagcat ttcattgtgaa gtactaggct cagttcttcg taccaccat actaatacc 300
tatcaaatat taacagtatt aaacatggag aaaataaaac tgtaactttt aagcatggaa 360
accttgatca aaaaaataaa tctaaaaata aatccttaat gaaaaaaaaa nattaanaaa 420
aaagggcggt cgctctagag gatccaagct tacgtacgag tgcntgagac gacatagctc 480
ttctatagtg tcacctaa 498

```

<210> 611

<211> 1069

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (176)

427

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1060)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1061)

<223> n equals a,t,g, or c

<400> 611

```

cctttgaaat acccctcact aaaggggaaca aaagctggag ctccaccgcg gtggcgggccg 60
ctctagaact agtggatccc cggggtgca ggaattcggc acgagcggca cgaggtatcc 120
acagggccac agcgacacca ctgtggctat ctccacgtcc actgtcctgc tgtgtnggct 180
gagcgtgtg tctctcctgg catgtacck caagtcaagg caaactcccc cgctggccag 240
cgttgaaatg gaagccatgg aggcctctgcc ggtgacttgg gggaccagca gcagagatga 300
agacttgga aactgctctc accacctatg aaactcgggg aaaccagccc agctaagtcc 360
ggagtgaagg agcctctctg ctttagctaa agacgactga gaagaggtgc aaggaagcgg 420
gtccaggag caagctcacc aggcctctca gaagtcccag caggatctca cggactgccg 480
ggtcggcgcc tcctgcgcga gggagcaggt tctccgcatt cccatgggca ccacctgcct 540
gcctgtcgtg ccttggaacc agggcccagc tcccaggag agaccaaagg cttctgagca 600
ggatttttat ttcattacag tgtgagctgc ctggaatata tgtgtaatg aaataaaaac 660
cctgccccga atcttccgtc cctcatccta actttcagtt cacagagaaa agtgacatac 720
ccaaagctct ctgtcaatta caaggcttct cctggcgtgg gagacgtcta cagggaagac 780
accagcgttt gggcttctaa ccacctgtc tccagctgct ctgcacacat ggacagggac 840
ctgggaaagg tgggagagat gctgagccca gcgaatcctc tccattgaag gattcaggaa 900
gaagaaaact caactcagtg ccattttacg aatatatgcyg tttatattta tacttccttg 960
tctattatat ctatacatta tatattattt gtattttgac attgtacctt gtataaacia 1020
aataaaacat ctattttcaa aaaaaaaaaa aaaaaaaatn nctgcggcc 1069

```

<210> 612

<211> 899

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (116)

<223> n equals a,t,g, or c

<400> 612

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gctttgtatt gcttatattg catctgagat tgtttgatc ttttttcctt gactagtctt 60
gctagagggt tatcatattt attgtttttg ctttacaaag aagccaatat ttttgnnttt 120
cttctttgtt atattttctc tattttgttg atttcagctt tttcttttct atgttaatat 180
gtcatattat tgtagtggat ggtagctct tcaaatcttc aactttctat tctgatttac 240
atatttaaag ctatagattt ccatgataat gctactttat ctcttgctgt agttttctat 300
gctgggtaac aaattaccac aggtttactg gtttataaca gcataatttt attatctcac 360
aatttcttgg gggttaagagt ttcagcatgg cttaactggg tctcacaagg ctgcagtga 420
gtcagctgaa ctryrttgct atctggagct cacagttctc ttctaaatta atcagattgt 480

```


428

```
tgataaaact tagttccttg aagctgtaga actgagggtcc tcagctactt agggctgctc 540
ttttatataa gcagtgtaac gtgacatgcc tttttaaggt cagcagaact tctgactaga 600
atctgtttca gagaaggcca gaaagagttc acttggttag gtcagagwca cctgggatag 660
tctccctttt gattaagtca gagtcaacta aataggcacc ttaattgcat ctgcaaaatc 720
ctttcacttt tgccatattc tcttactaaa tgtaacaggc gttgtccaca caaaggatg 780
gatatcgggc ttggaaagga tttcaggaac catcttagaa ttctgcctac tactaactcc 840
attctacaag tctcaatata tagcatttta gttattcact aactgcaaag ttttttatt 899
```

<210> 613

<211> 532

<212> DNA

<213> Homo sapiens

<400> 613

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gaacactaaa cagactattt aacttgaggg taataaactt agaataaaat tgtaaaattg 60
tatagagata tgcagaagga agggcatcct tctgcctttt ttatTTTTTT aagctgtaaa 120
aagagagaaa acttatttga gtgattatTT gttatttgta cagttcagtt cctctttgca 180
tggaatttgt aagtttatgt ctaaagagct ttagtcctag aggacctgag tctgctatat 240
tttcatgact tttccatgta tctacctcac tattcaagta ttaggggtaa tatattgctg 300
ctggtaattt gtatctgaag gagattttcc ttcctacacc cttggacttg aggattttga 360
gtatctcgga cctttcagct gtgaacatgg actcttcccc cactcctctt atttgctcac 420
acggggtatt ttaggcaggg atttgaggag cagcttcagt tgttttcccg agcaaagtct 480
aaagtttaca gtaaataaat tgtttgacca tgaaaaaaa aaaaagtcga cg 532
```

<210> 614

<211> 511

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (460)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (503)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (508)

<223> n equals a,t,g, or c

<400> 614

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gctttgaaac caattgcaga ttgcttggtt ttatacaaac tttgattagt ctttggcagt 60
agaaggcagt ttgctaaagt ggctttacac ttgggattat gctgtttctt tgggtgataca 120
taaagttcac attttttttt ttataacttc atggtcaaga gcttggaag aaagcccaag 180
tctcacttga ggacctgatg taattgcttc tctttgagct ccgaagaaaa gattgaggag 240
ctgctctttt gatttgggga gtgagcaggt taagtgtctt tactttactt tgscacccty 300
gtacagacaa agtccggtta caaaggcggg taactccaat gtgctattct ttttttytta 360
```

429

ccagctttac tggggataat gcacatactg tacaattcac ccacttaaag tgtacaattc 420
 agtggggtttt agttttattca tgggggttgt gcaacccttn accataaatc tatttttagg 480
 ggcacttttc atcatctcag gngngaanc t 511

<210> 615
 <211> 505
 <212> DNA
 <213> Homo sapiens

<400> 615
 gctcggcgag atccagtcga cagcttgctt cactcttaga acagcggcat cctctatttg 60
 gtctcgcacg gggaaacttg tggggtaggg gagagggtt agagctttga aaaagctttg 120
 cctctcggag gagtcaaagg ggcagtaact gtatgggggt agaggaaggc ctgcgaaata 180
 aaaaggcaaa ggaaccgttt gaggaggcta gttgccttct cggggccggt gtgtgtgcgg 240
 gggtagtggt aagggggagg aaggagcccg kgagcccga ggaccctccc ggagggtgcgg 300
 gcctgaaatt ccgctgggtg ccgggaggct ccgccctccg gactactgac ggccttcgca 360
 gccaatgcgc agccaggacc tcgcgttcgg gagggcgggt acttcctact ccagccctgg 420
 gctcggagaa ggccgcgtta gttctttttc tagggatgtc tgcggaaggg gcgccaggct 480
 gagggccagc ctggagaaag aaaga 505

<210> 616
 <211> 778
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (226)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (253)
 <223> n equals a,t,g, or c

<400> 616
 taggggttcta gggccctgtt cctggggact tgaaggcgggt ttacatact ggtcagacac 60
 ggctggaggc caaggtcaag ttgaaagttg cagtcagcc agcatgagaa ctgccatgcg 120
 agcgtagaga cacaggcagc agcaaaaggc ccattgcca catcccctca ctcttaattt 180
 tctctctctt tttaaaattc tcgcctctga ctgttcgggt gccanaatt ttttggtgcc 240
 ttctgtgggt ttntggggcg gtgtttaccg actcttctct gcctccgccc tgctcagcca 300
 gggctttgag cctcttcgggt ttcccgcca gaccggaaa aacgaaaaca cagcttgggg 360
 agccccact agccggcgcc tgtgccagct cacctctggc catggcgag ctgccgggtgc 420
 acacggcggc caaggccagc tccacattct tccctcccc tccacttca ccgtagcccc 480
 gaaccctgcg cgcagagaaa ggggtctcagc tccacagac actgggtccc tcctcaccaa 540
 aaatgggtgag acaagatttc atctgtcggc cgaggagcca caagcagggt tgtctgagag 600
 ggatgggtgct gggggaaggc tttggattgc atctcaaatt aagctttgct ccttaaattgt 660
 ggcgtctcgc caagaaaaag cttggggcct gaattcttga gatattgggt gcaccttatt 720
 gatcaaatat atctggactt ttttttagtt cccgatgtgt ccctatcatt aaaaaaaa 778

<210> 617

431

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ctagggtctca tgccactttt aatgtcattt tctaaaggaa aatcttatct atgatatttt 720
cccttataag agatagttgt tttgagtagg gttttttaa agataaagg agtaggaaat 780
tttttaaagc ctaaatatca aattcctttc cctttggagt tgggggaagk aatgaagggg 840
gagcaacttg ctctttcata tgagttggtc atagcatgta agaaccaatc ttgaaatc 900
gttttttttt taatggctta taatgtattt ctagaaatac tttgtactta aaatgataac 960
agtttgtatc tttttgtcca tataaagata ctttataaat aaaaaatta gcattgtaaa 1020
taatgttaat atgtatttat acaaaataaa tttactataa tataaaaaaa aaaaaaaaaa 1080

```

<210> 620

<211> 823

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (646)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (699)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (717)

<223> n equals a,t,g, or c

<400> 620

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ggagggtttcc tttgtccatt aagcaagccc caagaaccag aacccttttg ctgcttttct 60
tacataccta acagctctcc agtcatgatg accaagggtg ttcttcaatc aaatgtgttt 120
gwgggattttt cagtcgcgaa atgaagtgct ctctaataaa tgggacacca tgataaatat 180
gtattttatat ttagatgcca aagtatggcm aattatttcc aaatgataac taaaatggg 240
aattttcgat attctacett ttttatagaa ccagctcact tttcatttct ttttcatttt 300
gaattaagaa aattgktgag gatgtgggtg gttccagtgt gtggaatgga aaggaaactg 360
cagaatagtg tctgctcccc attcagaggg actgcttctt gtgcccccca gaccgggggc 420
ttcgacagct tctccacatt ccacacagat gcctaggagc agcgagttgg tatatgaaaa 480
gtctcccacc ttttctccta aaacttctct cctttctctc cataaaaaga aaaggaaagg 540
aacaaaagaa aaacattcag tttttctttt tctgaaaaag gtaagtcctt tcctgaagtc 600
atcaaatgaa acattatctg gaaattagtt tctaagtgtg tatatnaaga aatacttaaa 660
tataagttcc tgcagtattt attagatagt tgtaactgna aactcacctc ctagtanata 720
agagtttcag gttaaatact ggaacatata taggcagtca aaaatactac tttaaatgca 780
ttcacctaata ttaaagccat ggtttaaacac tttttaaggc caa 823

```

<210> 621

<211> 720

<212> DNA

<213> Homo sapiens

<400> 621

```

gctctaattgg aggaaacagt caacatgcaa aaatagatgt gtaatgtaag aagagtgatg 60

```

432

gaaactctag gaaacaatca aaaggaaatg ctagaataa taaaaatcac tgacataaat 120
aaagaatgtc ttcaataggt tcatcaacag aacaagtttg aggaaagaat gagtaagctt 180
gaagataagt caacagaaat aatttcgaaa gtataatata catctatttg gaataccaga 240
aggagaagaa caagaacaag aaactaaaga aatatttgaa gtaacactgt cagaggattt 300
tcccaaatta accacagcaa mtcacaagtc aagaagtaga gaacagtaaa caggagaaat 360
acaaaaacaa ttatacacia acttcagaaa accaaagaca aaaagaaaat cttcaaagga 420
gtcagagaaa aagtaacctg acttacagca aaacaggaca agaattaaat tagacttccc 480
atcagaaaca cagaagcaag aagactggag tgaagtattt aaatgctaaa ataaagaaaa 540
aaaatacaaa cttgagaaat aaagacttcc tcagacaaat gctgagggaa ataataccca 600
tcagaccttc cctgtaagaa aatattaaaa gaagttctca cggaaaagga aggtgataaa 660
gttcagaaac tcaaatctgc gtaacaaagg aagagtgcc aagaaggaat aaataaaggt 720

<210> 622

<211> 332

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (332)

<223> n equals a,t,g, or c

<400> 622

gccaccagta cctagccaaa gttagtttta atgtgagagt caaggactac agtggcatgc 60
tgaggtaaca actgcaggag catcgaggta acagcaaaaa tcttttactc caattgggtc 120
aatccagtta accatgtaag aaactcctca cctagggtca gtatgttact tctgtatttc 180
tgcaagcaca atccactgac ataaaagtct aataattaga ctttattgta agtctaattgt 240
atcttgtaca tgataaaatg tatgaacttt ggatcaatat ggcaagctga agacacctgt 300
catgtggggg gactattttg tttgggttct an 332

<210> 623

<211> 510

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (76)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (471)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (491)

<223> n equals a,t,g, or c

<220>

433

<221> misc feature

<222> (501)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (504)

<223> n equals a,t,g, or c

<400> 623

```

taaggctggt tcagagtctg agttgacttc tctttaatct acctatagaa cttttagggt 60
tcaaaaaata cttttnaaat gactttttgg gtttggaaag tacctttaat acatttaagc 120
tagtttttct cctggaaata tttagaattt cttccttaat tggcaacctt tatagaagtc 180
tggttaagatt tgtcgcaaag atgtgccaca gatggacaca aatttcccat tcgggagcaa 240
tatcttacca cagtgggtggc taaatgctag ggacaaaata caaggccgga actttccttc 300
cctcagatac cttgtgctgt ggtgttttgt tgccactttc tccctctcat tttcaattat 360
atgcacaatc ttccctttct agagtatgac tttggccaga tgactcacct gatgccacct 420
aagggcattg cctggccagg tacattttctc tggctccagc cttggctaag ntgatgacct 480
gagtcgatct ncacattcat ntentgaacg                               510

```

<210> 624

<211> 653

<212> DNA

<213> Homo sapiens

<400> 624

```

gtttttttat ggaaagaaca taaacatagt tttctaattt ggagaaatcg gtcttaatgc 60
aagtaggcat tttaaaatta cttttatgaa ttatttttag accctacata atctttttta 120
ttctgcaatg ttaaacagtt tctctagaaa atctgttttt gtttccctagt gactattaaa 180
ctattctctc ctacaacagt aatattttat ctataaattt aaatcatcat ttttggtttg 240
attgattata agatatatgt tttattatca tgtagcctag tttaagagtc ctcaatatwt 300
ctgaagtttt agtgattctg ctgagagaga gcatagaaaa aaataagaaa aaaaaaacca 360
acctagtatc tgttgktcag tagattgtag gtacttctgt ttatagaaat aataagggga 420
aaatgggtat tttagaatga ggatcttttg tgktgkacct cttgcttctc ttttatttga 480
ataataaagg raataacatc aaattaatgt ttarctact ttartatgga tattgaagtt 540
aaaatgtcat tcatttgcat ttatttagga aaagaagata tgcttcttaa acaaggtcag 600
atgtatatgg cagactcaca gtgtacttcc ccagggtatc caggcccaat gca          653

```

<210> 625

<211> 421

<212> DNA

<213> Homo sapiens

<400> 625

```

gagacagagc aagatgcctt caggaggaat ctctggccgt cttcttttgt aatatccaaa 60
gagcttttgt cagcgttgat atcaaagcgg tgtgaagaaa acataaggcc ataagactaa 120
tctctggaga gctgcacact gaaggggaac mtaagtctt gagtccctgg agtaccceaa 180
gtktggwttc agagagggtg ccattcatga gcaacactgc tagccattag tggccagcaa 240
gaaggggagt gaaaggagta tcttgtagat ggtgacttgg gtaatatgaa attgctgtca 300
tcaaggttta tcaaaamacc aaagggtaaa tattacatgt aggcaatgtg aggctgcccc 360
aaatgggtgtg tttcccagga acttgattca actctgagaa taaatgcatg agtactgaga 420

```

434

a

421

<210> 626
 <211> 500
 <212> DNA
 <213> Homo sapiens

<400> 626
 tcgaaccttt tggatctctg tcagaaatga atgtttatctt ctttcaagtt ttatcaagta 60
 ttaatacgtt ttattttatat tcttttaaat gttttattca gtagttctgt gaacttcaga 120
 ctttggtgtt cagcctaata gtatgcttct gtaacttcta cacattttat aagaactcat 180
 tcaaagttgt agtcctacca tagtggttca gggttccttg ttgtgtacac ttttactata 240
 atggcaaaat gtttcaaaat cattcagctt tttaaagaaa cttattatgc aaaagacact 300
 cttgaaatgc tgtgcatttg agctgaagt aaagaatttg tttcatgttg tactttgcat 360
 tatttttaagt tttcacatct ttaatatgct tttctatgct aattatatta gaaatctata 420
 aatataagtg gtttctttgt ttaaactagt cattaaaaat taggttgaaa atgaaaaaaaa 480
 aaaaaaaaaa aaaaaaaaaa 500

<210> 627
 <211> 545
 <212> DNA
 <213> Homo sapiens

<400> 627
 gttggtacgc ctgcaggtac cgggtccgga ttccccgggtc gaccacgcgc tccgctctgt 60
 tcctctgtgg ctactctccc atcttaaaaa cgatccaagt ggctcttttc ctccctccctg 120
 cccctaccc cacacatctc gttttccagt gcgacagcaa gttcagcgtc tccaggactt 180
 ggctctgtc tcaactcctg aacccttaaa agaaaaagct gggtttgagc tatttgccctt 240
 tgagtcattg agacacaaaa ggtatttagg gtacagatct agaagaagag agagaacacc 300
 tagatccaac tgaccagga gatctygggc tggcctctag tctyctccc tcaatcttaa 360
 agctacagtg atgtggcaag tggatttag ctgttgtgtt tttctgtctc tttctggtca 420
 tgttgattct gttctttcga tactccagcc cccagggag tgagtttctc tgtctgtgct 480
 gggtttgata tctatgttca aatcttatta aattgccttc aaaaaaaaaa aaaaaagggc 540
 ggccg 545

<210> 628
 <211> 679
 <212> DNA
 <213> Homo sapiens

<400> 628
 cccccgtttt aaaagatcag tagtctctat tcaaactttt aaaatgtcgt ggtattgtaa 60
 caatatattt gatgaaagaa gggtacagac tcccctgaag aaccagcttt cctacgcttt 120
 ttatttttct aacttgctta acctgatttt aaaatgactg caattccaga ctaaaaacat 180
 gcttcagccc tgtttcaaga cattatgctt cttttaacag tccaaattag tagttttatt 240
 tttcttctaa atctttgttt cacacttgta aaatcttggg aaggagggtt ttaaaacttt 300
 gccaggaatt gttacccatt tccaaaaaca gtttattatg ttcaaaaacc accatatctt 360
 tgagggactg tttgaaagg gagagggcaa cgcgggaaat aattcactct gcgcaccgga 420
 actattgtag ttcaggactt ccagctactg tatttagatg ttgggtttga atatacagat 480
 ttcttttcaa tacctgtaaa tatggctata ttcttgatt tgtacgggag tgtacaaaat 540
 gacactgaaa agtaataaat atgttttgac tatattgtgc agttatttca gaactgtgtt 600

435

ttgaaagtct tagaatgcat aatttgcatt tgagtaagga aatttataaat acagattact 660
gctgagattt taaaaaaaaa 679

<210> 629
<211> 905
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (165)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (793)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (803)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (816)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (843)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (869)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (889)
<223> n equals a,t,g, or c

<400> 629
cagtcgcaag tgactcttgc aataatagca tctcactcct atctgaaaag ttgacaagca 60
gctgttcccc ccatcatatc aagagaagtg tagtggaagc tatgcaacgc caagctcggg 120
aaatgtgcaa ttacgacaaa atcttggcac caagaaaaac ctagnccatg tcaataaaaat 180
cttaaaagcc aaaaaacttc aaaggcaggc caggacaggg aataactttg tgaaacgtag 240
gccaggtcga cctcggaat gtcccttca ggctgtcgta tcaatgcaag cattccaggc 300
tgctcagttt gtcaaccag aattgaacag agacgaggaa ggagcagcac tgcacctcag 360
tcctgacaca gttacagatg taattgaggc tggtgttcag agtgtaaate tgaaccaga 420

436

```

acataaaaag ggggttgaaga gaaaagggtg gctattggaa gaacagacca gaaaaaagca 480
gaagccatta ccagaggaag aagagcaaga gaataataaa agctttaatg aagcaccagt 540
tgagattccc agtccttctg aaaccccgagc taaaccttct gaacctgaaa gtaccttgca 600
gcctgtgctt tctctcatcc caagggaaaa gaagcccccga cgtcccccaa agaagaagta 660
tcagaaagca gggctgtatt ctgacgttta caaaactaca gagtaagtag tagtacctat 720
tagctaacat ccccttttct tccacatttg gaaaaatact ttgactatca aaaaacaata 780
tagattcttt tnggtttcat aanccgtgat gattnggttt ttgcactcat ggattgaagt 840
acnccttcct taaacttttg ggtcaaggnc aattacatta ccccttttnt gatgtggggg 900
ggaaa                                           905

```

<210> 630

<211> 800

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (732)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (772)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (776)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (798)

<223> n equals a,t,g, or c

<400> 630

```

gcagcctgga cgggccgcag agacgttcct gtcttaggcg tcccacgaga tgctcctgtt 60
cagccctgcc gaggtggaag cttggagtgg ctacggtgg atgcattgac gctgcagacg 120
ccagcaagtg ctacaaacca gagctggcct ttaactcaga ctgatggaga aggtgttaat 180
aatgcagatt agacttaaaa gtgttgaagc cattgcactg tgaacagcaa aaaaattgaa 240
gaactcttct ggcatttaaa aacaattact cagttcagca gagaagtcac tgacaaacga 300
gatcacactg actgctttgt cgttttgggt ttgtcttact cattaatgca aataagaaca 360
ttcactagca tctgtgtcgg gcctaccctc cctgggtcaaa tacagctaca gtctccctgc 420
agatacgagt tttccagaaa tgagccgatg ttttctgcga gaatcaattg gtcataata 480
atttacaaaa atgagtactg tatactatat ttgtaaactg tacactgcag atgctttatt 540
tactgaaat ttataataca cttatccatg tatatgcatg catgcatttt tgttcctgag 600
atccagctgt gaaatgttta ccagcacata aattaccagc acatgctctt ttttggttaac 660
ctactaggta aaactctcat ttattacatc aaaaaaaaaa aaaaaagggc gggccgcttt 720
agaggatcca ancttacgta cgcgtgcatg cgacgggtcat agctttcttct antagngtca 780
cctaaattca atttcacngg                                           800

```


437

<210> 631
<211> 378
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (13)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (17)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (40)
<223> n equals a,t,g, or c

<400> 631
actaacgggg ctnacacnatg gaagctcatt atagggaatn ctggtacgcc tgcaggtacc 60
gggtccggaat tcccgggtcg acccacgcgt ccgcgggagc cctttgctgt gtgctctgtc 120
cagtgtcatg agacgggagc cctttgctgt gtgctctgtc cagtgtcatg agacgggagc 180
cctttgctgt gtgctctgtc cagtgtcatg agacgggagc cctttgctgt gtgctctgtc 240
cagtgtcatg aggcaggtgt ttgcaaagcc agctctcggg tccgatgggg tattgctgac 300
ctacttttct aggggaaatg ctcttaaaca ctgtaattat gcatttctaa tgaaataaaa 360
tgtatttawr accacaaa 378

<210> 632
<211> 602
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (529)
<223> n equals a,t,g, or c .

<220>
<221> misc feature
<222> (540)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (548)
<223> n equals a,t,g, or c

<220>
<221> misc feature

438

<222> (583)

<223> n equals a,t,g, or c

<400> 632

```

gcccgcceca gtttgaggac ttgctatccc cgtgggaaca tcaccatgtc cgaggcacc 60
cgggccgaga cctttgtctt cctggacctg gaagccactg ggctcccag tgtggagccc 120
gagattgccg agctgtccct ctttctgtgc caccgtccct ccctggagaa cccggagcac 180
gacgagtctg gtgccctakt attgccccgg gtccctggaca agctcacgct gtgcatgtgc 240
ccggagcgcc ccttccactgc caaggccagc gagatcaccc gcctgagcag tgagggcctg 300
gcgcgatgcc ggaaggctgg ctttgatggc gccgwgtgc ggacgctgca ggccttcctg 360
agccgccagg cagggcccat ctgccttggt gccacaatg gctttgatta tgatttcccc 420
ctgctgtgtg ccgagctgcg gmgcctgggt gccgcctgc cccgggacac tgtctgcctg 480
gacacgctgc cggccctgcg gggcctggac cgcgccaca agccacgna cccggggccn 540
gggcccgnca gggttacaag cctcgggaag ctttttccac cgntactttc gggcaagacc 600
aa 602

```

<210> 633

<211> 669

<212> DNA

<213> Homo sapiens

<400> 633

```

gacaggatcac gtccctgtaa cccaatctct cggttgattg atagcagaac agctcttggt 60
ggtctgagaa ggcaggataa gtgaccacat atttatgcc aacctccac caggagagag 120
ccttctccac aggtttgata aattcaatca ccaactgtgc tgcgtccct gactctgcta 180
ctcccgttct tctgtcttct ctgctccgta tctcagctct cactgacccc agggctgggc 240
tgacatcaag atgggagccc agcccacggg ctttataaac acccaagaac cgtttcagat 300
cttctctgtg ctgatgcagg tagtttttaa tttttctcag ttccagtgat agaaaacca 360
cacaatacat cctctgccag tcttaataga atatcagagg taagaggggc ctgagagaag 420
ctctgacgca gtgctgctgg ggaagggaag tgactaacc cgggtcagcc tgccatttag 480
ggaaagagct gaggttctta cccttggtgc atgctgccac ctctccttag ccagtgtct 540
tgtacatcca cacagcacc taaggagcca tagtcacat caaagactca accctaagg 600
ccttcaagat ctcaaagtgc cttctgaagc atcagagatt aaatattgtt caaactaaaa 660
aagtcgacc 669

```

<210> 634

<211> 405

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (330)

<223> n equals a,t,g, or c

<400> 634

```

gcaattttta actagggttat cctgtgaatt aaacatttta atttattttt tatcatgtat 60
gattttattta tagatgcata catatgcagt aaaagcagta aaggaagcat gagaaagata 120
aacacaaatt gatgggtggca gtgacctctg gggaaagaat tataggataa aaacaaaaaac 180
atatatactt taaaaagtat acttcgtgkt atgaaatatt ctcatgtgaa tgcatgttaa 240
aatgggratwa aagtagaata agttataata ctgggtactt agaaaccaga tattaaactt 300

```

439

accttttatta tagtggtacc tgggtgccsn tagaattaca gtactwaaag gtacaaatta 360
tactaaaaat gatattggaa gatttgcaca tgggtgggtt ttaag 405

<210> 635
<211> 1329
<212> DNA
<213> Homo sapiens

<400> 635
agagagaaaa gcacctttga atgcagtgaa tgtggaaagg ctttcagtta tctctcaaac 60
cttaatcagc atcagaaaaac tcatactcaa gagaaagcct atgaatgtaa agaattgtggg 120
aaagctttta ttoggagtgc atctcttgct aagcatgaaa gaattcatac tggagagaaa 180
ccctatcagt gtcmkgaatg tgggaaaacc ttcagttatg gttcatccct tattcagcat 240
aggaagatcc atactggaga acgaccttac aagtgtaatg agtgtgggag agcattcaac 300
cagaacatac accttacaca gcataagaga attcatacag gagccaagcc ttatgagtgt 360
gctgagtgtg gtaaagcctt tcgacattgt tcatctcttg ctcaacatca aaaaactcac 420
acagaagaaa aaccttacca gtgtaataaa tgtgaaaaga cctttagcca gagctcccat 480
ctaactcagc atcaacgaat tcacactggg gagaagccct ataagtgcaa tgaatgtgac 540
aaagccttta gccggagcac tcacttgact gaacatcaga atactcatac tggagagaaa 600
ccttataact gtaatgaatg cagaaagact tttagccaga gcacatatct cattcagcac 660
cagagaattc attcaggaga gaagcctttt ggatgtaatg attgtggaaa atccttcaga 720
tatcgctctg ctctcaacaa acatcagaga ctgcatcctg gcataatgaca attctaggaa 780
catcataaat tttaggggaga tatttacttt agtttgcct tttgttaagt actgaagaat 840
cagagtggat tttagaaactg ccttgaaatc ttttaaattt tcactatcat gttatggaat 900
ggaaagtaca ttgggctgaa ctaatccaat tgttattaag ccactctgtg acattagaaa 960
actctactgt tttaagcttt agtttccttt atggaatgaa ggmthtggag tagattattt 1020
caaaggtagt ttggagtttt ataatcagtt ttgtatat tacaatatttt cttgaatggg 1080
tttactatac atcagcattt tgctgtgttg catctagaat gtgtatgttt atgcatgttt 1140
tgccaataga atttgtgctt cagtaactag atcggggatc tagtatgtc ctggtctaatt 1200
gcatttacat tgtttaggta actggttcct aataaaaaaga attataaaat accctcaaat 1260
taacaattca attgcatata atagcctaac tcagtaagaa tattaaaact tactattatt 1320
aaaaaaaaa 1329

<210> 636
<211> 440
<212> DNA
<213> Homo sapiens

<400> 636
gctgctggaa gccagggcgg gggaaggggg ccgtgtgtcg cgsagagcgc ccttgagcct 60
tacgcagagg tcttgtgtgt tcttagttaa gccctccac gcccgaggcc ccatcgcttc 120
ctctccaccc tctttaccca ccaatattcc aagccagat cctaattccc caccgcatta 180
ccccgccctg gatttgggga atgtttttct ttattttaat atagctcaag gaaaaaatac 240
gtatatcttg agagatttgg ggtggggaaa acaaaagcct tgcggtgtar aaaaaacaaa 300
ggcttatttt tataaatgtt taatgttttc acccctgga tgctccgara cgccgtaatt 360
gtgacggcgg ggtacgtgtg ccataaatca tttagttgct aataaaaaat ctgcctgttt 420
gccctggaaa aaaaaaaaaa 440

<210> 637
<211> 1216
<212> DNA

440

<213> Homo sapiens

<220>

<221> misc feature

<222> (4)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1078)

<223> n equals a,t,g, or c

<400> 637

```

aagnggggaa acgcttcagg ctgatgtggt gatttacggt attggtatca gcgccaacga 60
gcaactggct cgcgaggcca accttgatac tgccaatggc attgtcattg atgaggcttg 120
ccgcacctgc gatcccgcca tctttgccgg tggcgatgtg gcaatcactc gtcttgataa 180
tggtgcacta caccgctgcg aaagctggga aaacgccaat aaccaggcgc aaattgccgc 240
tgccgcaatg ttagggctac cgctaccgct actgccgccg ccgtggttct ggagcgatca 300
gtacagtgat aacttacagt ttattggcga tatgcgtggc gatgactggc tttgtcgtgg 360
caacccggaa actcagaagg cgatttggtt taatctgcaa aacggcgtgc ttatcgggtgc 420
ggtcacgctg aatcaggggc gtgagattcg cccaattcgc aaatggatcc agagcggcaa 480
aacgtttgat gcgaaactgc tgatagatga gaacatcgcg cttaaatacac tgtaaccagg 540
ataattagcg aatatctcaa tgcctggggc gtggcgaggt gcaagagtgt gtattacgtt 600
taaatacatat tatcttgcaa agggawtggg ctgctcgcca tatcgtcaat cgtatcaatg 660
cgttcaaacc gactgccgat cgtccgtttg tactgggcct gccgactggc ggcacgccga 720
tgaccaccta taaagcgta gtcgaaatgc ataaagcagg ccaggtcagc tttaagcacg 780
ttgtcacctt caacatggac gaatatgtcg gtctgccgaa agagcatccg gaaagctact 840
acagctttat gcaccgtaat ttcttcgatc acgttgatat tccagcagaa aacatcaacc 900
ttctcaacgg caacgccccg gatatcgacg ccgagtgccg ccagtatgaa raaaaaatcc 960
gttcttacgg aaaaattcat ctgtttatgg gcggtgtakg taacgacggg catattgcat 1020
ttaacgaacc ggcgtcttct ctggcttctc gtactcgtat caaaacctg actcatgnac 1080
actcgcgtcg caaactctcg tttctttgat aacgatgtta atcagggtgc aaaatatgcc 1140
ctgactgtcg gtgttggtac actgctggat gccgaagaag tgatgattct ggtgctgggt 1200
agccagaaaag cactgg                                     1216

```

<210> 638

<211> 557

<212> DNA

<213> Homo sapiens

<400> 638

```

ggggattctg ttcataatacc tggatgggtgc ctttgacctt tgtgtcactt cagtgtcaaa 60
aggaggattt gaaaggggaa aaacggcaac atttgcactg ctgtacaggt tgagaaatat 120
cctatttgaa agaaatagaa gagtgatgga tgtcatttct cgttcacagc ttacttgga 180
tgatcttttt tctgactact atgacaaacc tctcagcatg actgatattt cactcaaaga 240
agggacccat atccgagtta acttacttaa tcacaacatt cccaaagggc cttgcatact 300
ctgtggaatg gggaacttca aaagggagac agtttatggg tgctttcagt gttctgttga 360
tggtcagaag tatgtgagac ttcattgcagt tccttgttt gatatttggc acaagaggat 420
gaaataaaaat gaaaaatgaa tacaccgtgt tgggtgtttta ggtgcagttg tgccacaaac 480
cttccctaaa ttatctaggt ttgmwwtgat smmttaaat aaaatgagaa aagcaaaaaa 540
aaaaaaaaaa aaaaaaa                                     557

```

441

<210> 639
 <211> 1269
 <212> DNA
 <213> Homo sapiens

<400> 639
 aattcggcac gagtttgtat tttgagtaga gacagggttt caccgtgttg gctaggatgg 60
 tgtctatctc ttgaccttgt gatccacccg cctcagcctc ccagagtgtt gggattacag 120
 gtgcgagcca ctgcgcctgg ctgggttttca tgaatcttga tagacatcta taacgttatt 180
 attttcagtg gtgtgcagca tttttgcttc atgagtatga cctaggtata gagatctgat 240
 aacttgaatt cagaatatta agaaaatgaa gtaactgatt ttctaaaaaa aaaaaaaaaa 300
 aaaatttcta cattataact cacagcattg ttccattgca ggttttgcaa tgtttggggg 360
 taaagacagt agaaatatta ttcagtaaac aataatgtgt gaacttttaa gatggataat 420
 agggcatgga ctgagtgttg ctatcttgaa atgtgcacag gtacacttac cttttttttt 480
 ttttttttta agtttttccc attcaggaaa acaacattgt gatctgtact acaggaaacca 540
 aatgtcatgc gtcatacatg tgggtataaa gtacataaaa tatatctaac tattcataat 600
 gtgggggtggg taatactgtc tgtgaaataa tgtaagaagc ttttactta aaaaaaatgc 660
 attactttca cttaacacta gacaccaggt cgaaaatttt caagggtata gtacttattt 720
 caacaattct tagagatgct agctagtgtt gaagctaaaa atagctttat ttatgctgaa 780
 ttgtgatttt tttatgccaa awttttttta gttctaataa ttgatgatag cttggaaata 840
 aataattatg ccatggcatt tgacagttca ttattcctat aagaattaaa ttgagtttag 900
 agagaatggt ggtgttgagc tgattattaa cagttactga aatcaaatat ttatttgtaa 960
 cattattcca tttgtatttt aggtttcctt ttacattctt tttatatgca ttctgacatt 1020
 acatattttt taagactatg gaaataattt aaagatttaa gctctggtgg atgattatct 1080
 gctaagtaag tctgaaaatg taatatattt ataatactgt aatatacctg tcacacaaat 1140
 gcttttctaa tgttttaacc ttgagtattg cagttgctgc tttgtacaga gggtactgca 1200
 ataaaggaag tggattcatt aaacctattt aatgtccaaa aaaaaaaaaa aaaaaaaaaa 1260
 aaaaaaaaaa 1269

<210> 640
 <211> 691
 <212> DNA
 <213> Homo sapiens

<400> 640
 gggaatattg taatacagtc cagctagatt ctgggataga ttaccggaaa agggaaacttc 60
 ctgctgcagg aaaactctac tacctcacia gtgaagctga tgtggaggct gtcattggata 120
 agttgtttga tgagctggct cagaaacaaa atgatttaac tagaccaagg attctaaaag 180
 tgcaaggcag agagctgcgc ctgaataaag cctgtggaac cgttgccgac tgcacatttg 240
 aagagctgtg tgagagacca cttggagcca gtgactattt ggaactayca aagaattttg 300
 atacaatatt tttacgaamc attccgcaat ttactctggc aaacaggact caaggctcgaa 360
 gattcataac tctcatcgat aacttttatg atctcaaggc gcgtataatt tgctctgcgt 420
 cgactcctat atcaagctta tttttgcatc aacatcatga cagtgtgttg gagcaaagca 480
 gaatactgat ggatgawttg gggctkarcc aggattcagc agaaggactc tccatgttta 540
 ccggagaaga ggaaatcttt gcatttcagc gcacaatttc ccgactcacg gaaatgcaga 600
 ctgaacagta ctggaatgaa ggagacagaa ccaagaagta actgccactt ttgcataaat 660
 aaaactctag acaaatgggt aaaaaaaaaa a 691

<210> 641
 <211> 604

442

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (528)

<223> n equals a,t,g, or c

<400> 641

```
cgcgctcgact tttttttttt caatttcaag gattacgaaa ttcttctgtc ttagttacaa 60
acaaaatgca gctatgaagc actgggaagt aaatgcaaaa tatagaaaga atcttcatga 120
ttctcccaaa ctgtaagcac agtcacaaa gtctcattgc tttagaatgt tttctggatg 180
aacaagttac cagctgcaaa ccgacttcag aagtgaggaa aatgttttct catgtttcat 240
gtagctgtca aattttcaaa aatcctccat cttcaatca ccagtgggg aaaatgtgtt 300
ataaaacact gccccttga gtattctggg aggaatgtct taaaaaaaaa aaaaaaacag 360
carggagaaa gtactttcaa attctttact aaccactaac agaatttcta agaagcaaaa 420
gaaaaccaca gaaaggaaat gtacatgaat aaagttgagc aggatgtgta caactttaaa 480
ctgtattgta ttcattgtgc taaacaatat tggccttctc gatgattnta ttcattgtgc 540
tccaaagtta accctgtaga actaagtagg tgaagagata ttttgtataa gtgccacaga 600
agag 604
```

<210> 642

<211> 961

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (31)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (32)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (923)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (947)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (953)

<223> n equals a,t,g, or c

443

<220>

<221> misc feature

<222> (954)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (960)

<223> n equals a,t,g, or c

<400> 642

```
tagatagaac agatgttttg tgtgaaatnt nntatcttta acttaatwaa ccagcaggaa 60
ctgtatgaac acaacacacc caactgacaa acagagagaa ctaacatgtt tatttagctg 120
tatgtatata tgcttaacta cacccgagga agctgtagag ttagaaaaac atgaaccatt 180
aacagatgtg gcctccctgc agaactttta ctttgaaaaa gaagtacgtc tgaaccagat 240
tcacatgttt gatatttgga tgcagagaaa atggggcaga aagcatcgca acagttggct 300
ctgaaggaca gcaaagaggt gcccgctcgtc tgtgaggtgg tcagtgaagc tatagtccat 360
gcagctcaga aactgaagga gtaccttgga tttgaatatc ctccaagtaa actctgcca 420
gctgcaaata ctctgaatga gatcttctta atccatttca tcactttctg ccaagaaaag 480
ggagttgatg agtggctgac caccaccaag atgaccaagc accaagcctt cctgtttggt 540
gcagactgga tttggacctt ttggggatcy gacaagcaaa taaagcttca gctcgagta 600
cagactctgc agatgtcttc acctcctcct gtggaatcta agccttgatga cctttccaat 660
ccagaatcaa rggtaragga rtcttcctgg aagaaaagta gatttgataa gctggaagaa 720
ttctgtaact taataggaga ggattgcctg ggtctgttta tcatctttgg tatgccagga 780
aagcctaaag acatcagggg agttgtcctg gacagtgtca aaagtcagat ggtgaggagc 840
catctgccag gagggaaggc tgtggctcas tttgtcctgg aaactgaaga ttgtgtgttc 900
atcaaagagc tgctcaaaat tgnctgagta agaaagacgg gctgganaga agnnggcaan 960
g
```

<210> 643

<211> 425

<212> DNA

<213> Homo sapiens

<400> 643

```
acatggaagc ttttttacc aataactgtg ttgcatcatc ctccagtttg cctgggtgtcc 60
ttaatcaatg gaaggggaat aagcaaactg agttttctta caccttttga gtatagtgtt 120
tttgccatca tagatgtggc tcctcataat tctccaactt ttatattaaa aaaccaaaac 180
ctcaaaaatt gtagttcatg tcagtcagtg atgactcatc ttagaaktat tttgtttttg 240
gatgtgtgaa tgtgcatagt tcttaaagtc caacattcat gtaataagac atcttgcata 300
taacaatgac ccttacgtct aagatgttaa atagatccta agcctgggat aactttatct 360
aagtatcctt atttgcccct aaaatgtctt taatacacat tacttggggt atytcttgaa 420
tgaac
```

<210> 644

<211> 419

<212> DNA

<213> Homo sapiens

<400> 644

```
ggtttcaatg ttttgtctgt gtctctctga ttattttgct tggtgattgg ccagttgtta 60
```

444

```
attctgtctt tgtgagttgt ctttttctca gtacttggcc tatttgcctt tgatttgaaa 120
aagctcttta tgttgtagtc attttaattc ctgtcatatg ttttgtaaac aatttttcga 180
gttcataaatt tttcaatctt gtttgtatta tattttgccca cacaaaaatt ttaaatttgt 240
atagtcaaatt ttatcagttt ttttccttat gttggacctt ctaatctcaa ggtactaaat 300
ataatctagc attttttttaa acattaaaaa tttttaatcc atctataatt tatttttagga 360
tagggagtgga ggcaggggaa ggtatctttt taaataaaaa tcggttgctaa aaaaaaaaaa 419
```

<210> 645

<211> 655

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (14)

<223> n equals a,t,g, or c

<400> 645

```
acagcctaac tttncagcta gacagaatgg ccattaagaa tatttcctaaa atccaagttt 60
atcaaaatta ttttgtggga aatcatcaat ctattttatt aatgttatgt gtttaatttt 120
ggacttattt tgggaaaaaac tgttcaaatt gggtcctttt aagcttattt taagcagcct 180
agaaggaaga agctacttag ctaatgaaag ctgagacact ttaataaaaag caggatctta 240
agagcattgt ttttccttaa aaactttata ctctcagata atctgcaaca acaaaaatta 300
agaaatccct gacttttgta gaattcccac tgtcaaattc tctactgactt atgagtgtga 360
gagaagttat cttttgtttg aattctgata gaacagttta actcctttct aaggatataa 420
aaaattcatt ggaaagtgtg tatatttcaa agactctcaa ttatctggac tgaaggcact 480
gttctcacta tggccagatg aatgggagta ttctgtacat gaatcatgct gtatttttaa 540
tcaggacatc acttaagtat taatgtttgtg tgtacagatt tttgttttgg gatttttttt 600
gcctaaataa atgttataaa ttttatgtaa aaaaaaaaaa aaaaaaaaaa aaaaaa 655
```

<210> 646

<211> 458

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (371)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (427)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (428)

<223> n equals a,t,g, or c

<400> 646

445

```

gccctctctt ccaatatcca tgtctcatat actatggctt actgttgaaa tccaactggg 60
aagaagataa ttctttgagc aagcaatggt agattcaggc tcctacagaa acagcattga 120
tcatactgtg gttcttcgag agaagctgcc catccgcagt aatatcttcc ctctgatgct 180
ggaaactgtc gacggccatc cacttattaa tggacccata actaaggaaa catcacctgt 240
ccaagttcaa attggaaacc atgttgaaga gctccagttt gacattattc atgcaccacg 300
ataccctctg attattggaa tccattgggt tgagacacat gaccaaacat araatggart 360
acccgcactg ngtcctttct atcacgttat ttgtcactac aattgcttca ggcacagggtg 420
ggaatannaa gaaatccgtg atgaaataat tttctggg 458

```

```

<210> 647
<211> 285
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc feature
<222> (153)
<223> n equals a,t,g, or c

```

```

<220>
<221> misc feature
<222> (162)
<223> n equals a,t,g, or c

```

```

<220>
<221> misc feature
<222> (236)
<223> n equals a,t,g, or c

```

```

<400> 647
aaggctgaca caggagcaat caagaaccca ggagacgggtg gttgcagtga gctgagatcg 60
cgccattgcc ctccagcctg ggcaacaagg gtgaaactct gtctcaaaaa acaaacaaac 120
aaatgcattt aactattcct gtgtaacaaa ttntaaaggg angctgtaaa gtaaagggtt 180
ttcttatcca aacagattgc tcttcttgaa aacagcagcc tgyggttatg tcaganatgc 240
aaacactgct gaaggctaca gagagaagct ggtaactggc tgccg 285

```

```

<210> 648
<211> 1872
<212> DNA
<213> Homo sapiens

```

```

<400> 648
aattccgatt ttatgccagt tgcaccagca tgcagaatat ttgtaatgca tttcaaagt 60
gatataatgg caccctttgt cagaatcaca aagctcactg cggcactgct acaagaggac 120
actgaggaaa atctggccct atgaacctag tcaaccccaa gcaaaaagaa tgactatgtg 180
tgtgagtgca gcacatggcc agttcgtttc tcaactgttt ggaaagccct gtgtgccaaa 240
ccaaggacgt gtctttcagg gaaagggttaa ttttccgaag tttattaaaa tagaacttgg 300
aaaaccaagc attttgaatt tattccagtc ctctgggcac cattcctatt tcttctgcca 360
tgtcaaggag aaattccaag cctgcattct gtcatgctaa aataaccagc ccatacttct 420
cggtgacctt ctgttgaaag tacctgagcc tgcaaatgta aaaatgattg tatctgaatt 480
tgactaatg gtgtctgaga gcaaaaagag tgtgacctct attggaaacc tttgttcaaa 540

```

446

```

ttcaataatt cagagatgct acatacttct gcaagcttcc tgattatggt cactgtaata 600
ttaatgacct aagtttgaat gtatttcctt acagtcctatt aatttgacat ccatctttta 660
cctgggggatt attacaattg caataagtca ttaatgtttt cttcacacag cttcttaaac 720
caagtttctc tgcagctctt tcggttctgc ttacagtgtg tgggaaatct gatttttttc 780
ccctagtaat agtttgataa gaaatttagt gtattgactg cctcagtgc acaatttatc 840
tttaaagggtg tggaagctgg tggggaccaa atgttacctg tgtttttgct gttgattgct 900
attttcagaa gcaaaccatg tttttcactt acagtaggag tcaacaaatt tgggatttta 960
gaaggggggag gagggagcta tttgtgtaag actgctgtca tatttgacta catattaaaa 1020
acagtaaattg agcattttgt tttaatttct taaatacctt gtctttcaac atacgttttg 1080
tttcctttct tccattagtg ttcaaaagggt tctaccctt gtggaagaaa ttctgtgtgc 1140
agaattcaga ggcacaaggc tgatggcaag attagaaagt tattttgctt ctaaaccac 1200
cccgatgtgg aaactgatac tagctagagg gagctgtaga aaacaaagat ttcaggattg 1260
cacagtgtgt gggcaatggg atggagactt tttccctat tcccagccac agtgcccaag 1320
cgttcaagtc ycctggatca gacagatggg attttagctg ctgctttaa tccctagtgt 1380
ggaataagtc aaggtacytc agttcagctc ttgcctctgt cactaatctt gctttatgaa 1440
ctcctttgat tttctgaata agttccagaa gggtctctat tattctgtcc ttcttccaaa 1500
ctggaaatgg ctgtatctaa ttctcaggat attttggatg tgtgcctcag gtaatttatg 1560
tggaatgtgt aaagcaagat gtctccaatt ctgaatatc cttcccttt tcccaatcct 1620
ccactcttgg actaccttta taacaacacc gagtacgcac agacctgaac ccatgcccac 1680
gaagcacaca caatgactgg agctgtcggg aattcctgtc agtggcattc cctgagcact 1740
ggctctgtac aactcaatta taatttttta agaatacaca ctctgtatag atcttttgga 1800
ctgtactgat taaactttga tattgtggag taaattcaga agtgcaattt taaaaaaaaa 1860
aaaaaaaaaa aa 1872

```

<210> 649

<211> 840

<212> DNA

<213> Homo sapiens

<400> 649

```

aattggaagg gaccttaag ccctctaaga aagagttggt tagtagcagc tagaagccag 60
gtcttccaaa tcacagtcct aaatgatgaa tgttgaatga tgcactatgt ttttgtttaa 120
atgagatttc ctgaaaatag ttaatttcag aattaaggga aattgatgtc gctatcatga 180
ggcatcataa aaatatgtat tttacaagggt gaaggcattt caagtagata tagttcttga 240
tgaagcagga agaacatgga tctgggattt ggaagacctg gcttctagct gctactaacc 300
aactctgtga ctctgggaaa gggggactca gttcttactt ctgtaacatg aggacaccgg 360
actatttgaa ttcagaactt agaaaattgg aaggggacctt aaagccctct aagaaaagagt 420
tcgggaatgt tctccattgc tgtcagtttt cctccaaaaa taacctggct tggaagttat 480
tggtccagtg ggaatttgat tccccataga aactggagaa aaggtaatgc aagtagagag 540
gaacagctgt atttctgctt gagtaataaa cccactaaca gattctggta cgaattgtgg 600
agacataaag agaattgagt tatgtactct aagtgtacca gtttcttcac tctctcctgg 660
cagaagatgc aacactttta gtgattctgg gattctggga tgtgttccta ttaattctaa 720
tacagatgaa gaagatgtgg tagaggaaaa gatggttagca gaaggagtga ataaagaggc 780
aaaacagccc gctaaaaaga aaagaaagaa gggtttgcca attagggga aaaggcgtcg 840

```

<210> 650

<211> 823

<212> DNA

<213> Homo sapiens

<220>

447

<221> misc feature

<222> (4)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (192)

<223> n equals a,t,g, or c

<400> 650

```

cggntttgga gcatataccc aactttttctc tggatgatat ggtaaagctc gtagaagtcc 60
ccaacgatgg agggcctctg ggaatccatg tagtgccttt cagtgcctga ggcggcagaa 120
ccctgggggtt attagtaaaa cgattggaga aagggtggtaa agctgaacat gaaaatcttt 180
ttcgtgagaa tnattgcatt gtcaggatta atgatggcga ccttcgaaat agaagatttg 240
aacaagcaca acatatgttt cgccaagcca tgcgtacacc catcatttgg ttccatgtgg 300
ttcctgcagc aaataaagag cagtatgaac aactatccca aagtgagaag aacaattact 360
attcaagccg ttttagccct gacagccagt atattgacaa caggagtgtg aacagtgcag 420
ggcttcacac ggtgcagaga gcaccccgac tgaaccaccc gcctgagcag atagactctc 480
actcaagact acctcatagc gcacacccct cgggaaaacc accatccgct ccagcctcgg 540
cacctcagaa tgtatttagt acgactgtaa gcagtggtta taacaccaaa aaaataggca 600
agaggcttaa tatccagctt aagaaaggta cagaaggttt gggattcagc atcacttcca 660
gagatgtaac aatagggtggc tcagctccaa tctatgtgaa aaacattctc ccccgggggg 720
cggccattca ggatggccga cttaaggcag gagacagact tatagaggta aatggagtag 780
gtttagtggg caaatcccaa gaggaagttg tttcgtgtt gag 823

```

<210> 651

<211> 541

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (7)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (8)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (66)

<223> n equals a,t,g, or c

<400> 651

```

ggcacgnngg gagggccagg gagaacgggg aaggacatt tagtttgaga cggtgctgag 60
ataggntcat gaaggaagag gtgaaggga ttctgtgaag agtggcgctg cgttgctgcc 120
ctctggtccc caaagagatt agcgagggt gccagatgtg cctttccttc gtgcccggag 180
agcctcaggt ggtggttgg acagataaat ccttcaccta cgattttgta tttgatccct 240
ctactgaaca ggaagaagtc ttcaatacag cagtagcgcc actcataaaa ggtgtattta 300

```

448

```

aaggatataa tgcaacgggc ctggcctatg ggcagactgg ctctggaaaa acctattcaa 360
tgggaggtgc atatactgca gagcaagaga atgaaccaac agttgggggtt attcctaggg 420
taatacaact gctcttcaaa gaaattgata aaaagagtga ctttgaattt actctgaaag 480
tgtcttactt agagatttac aatgaagaaa ttttggatct tctatgccca tctcgtgaga 540
a                                                                 541

```

<210> 652

<211> 1655

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1378)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1444)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1521)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1606)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1648)

<223> n equals a,t,g, or c

<400> 652

```

agtctggagc cggcgcgtag gagcggggcg cgggctgtg ccctctccta ctcctcaccg 60
cgcgmgcggg gaaccagtar cgcggetgc ttcggtgcc gcggtcgggtg gtcgttatgg 120
attctccatg ggacgagttg gctctggcct tctccgcac gtccatgttt cccttttttg 180
acatcgcgca ctatctagtg tcagtgatgg cggtgaaacg tcagccggga gcagctgcat 240
tggcatggaa gaatcctatt tcaagctggg ttactgctat gctccactgt tttgggtggag 300
gaattttatc ctgtctactg cttgcagagc ctccattgaa gtttcttgca aaccacacta 360
acatattact ggcattctca atctgggtata ttacattttt ttgcccgcac gacctagttt 420
cccagggcta ttcatatcta cctgttcaac tactggcttc gggaatgaag gaagtgacca 480
gaacttggaa aatagtaggt ggagtcacac atgctaatac ctattacaaa aatggctgga 540
tagtcatgat agctattgga tgggcccagag gtgcaggtgg taccattata acgaattttg 600
agaggttggt aaaaggagat tggaaaccag aagggtgatga atggctgaag atgtcatacc 660
ctgccaaagg aaccttgctg gggtcagtta tcttcacatt ccagsacacc cagsatctgg 720
caatatcaaa gcataatctt atgttccttt ataccatctt tattgtggcc acaaagataa 780
ccatgatgac tacacagact tctactatga catttgctcc ttttgaggat acattgagtt 840

```

449

```

ggatgctatt tggctggcag cagccgtttt catcatgtga gaagaaaagt gaagcaaagt 900
caccttccaa tggcggttggg tcattggcct caaagccggt agatgttgcc tcagataatg 960
ttaaaaaaga acatactaag aagaatgaat aaattttacgt gatgagctct acaaggccaa 1020
aaattttttt tcttatctac ctgttatatt gtgctaattt tctatgtatg tgatgtgaaa 1080
tgaagactat atatatggaa tggagggtgac agaaagaaag aaattccttg tttgagggag 1140
acttccccct tctggattgt atttgtagag tgttacgagt gtatcatgtg attatgcttt 1200
accggtataa gagattctgt tgtgattatt tgaatagttt tatattaata aaagaagacm 1260
aaatttttta aatgttagaa aaagcagatc tgtcattgca aagtaacaaa aattttaagc 1320
ttttaaaaaa gtaagatttt tcgtattttt aaaatttgaa tctattttga gcttttagntc 1380
agcagaatta aattttttact tgacattatc attaaaattg ctaggtatgg agaacaattc 1440
ctgntttatt ttgaacactg agaaagaggt aaacttttcc taaaacactt tatattataa 1500
accgaaaaat aaattgctag nttatatttt aagatattaa catcatattt tttaataata 1560
cctacatcaa atgggaaaaa atctgaaatt tttttttcat tagcanggat ttttctacta 1620
gaaagtagtt taactacttt cattttanaa ccaga 1655

```

<210> 653

<211> 1160

<212> DNA

<213> Homo sapiens

<400> 653

```

tggcgctagt ctgaccctcc gccaggcaaa aggaagattg tctttggcta tagagttttt 60
tttttaaaaga ttactaaaca tacaggaagt gataagaagt atcattcatc agaagcatca 120
ttcatcaatc aacttgaaga aaaagggtgat atattatttc tttaagggtgc tgtgtgatgt 180
gttaagagca tattagaagg aatgggtttt tctaattttc ttcagaggtt atggtggctg 240
agacatcgag tctatatttt ggggcaaaaa ctaaaccgca gcacaaaagg aaatctatat 300
taatagaata ttttgttgaa caaaggaggt tagataagaa ctgcaaacca acagactcag 360
caaacaagga aagaaacgtg ttagccataa gacatgtttc aagtgaatcg aagtccaata 420
actgtagact tcagaagaaa aaagttttca aaaattttat caaaacaggt cactgataaa 480
taactcctcc agtaatagag ctaggcctga aaccaraatt aattaaaaaa ttaacaaaac 540
agattgaacc tgaattaaat ttctttttgat aaaaaaactt attaaaaata atcaaaattt 600
tcctcaaatt tttattacct tgtccaaagt aaagcaagtg tcttttagca ttcagccag 660
cttttctcat gktctaggaa tgacagaaac cttacttgaa gcaaactagt atttttgttg 720
aaaatgkata tcagcatcag tttaaagttga tttttcagac ctgctcctca gtaataatac 780
tagctagtca gcattcacgc ctaccaggac acaaaaatcc tcttcaaaac tactcagaaa 840
agaaagtcac tactcaggaa tgatgtccat tcaggagaaa tcaaaagaga attcctccaa 900
agttactaaa aaaagtgcgc ataagaattc agaaacagaa attcaggatt ctcaaaagaa 960
tctagcaaaa aatcagggtcc aaaggagact ataaaaatcac aggctaaatc ttccagtga 1020
agtaaaataa atcagccaga attggaaaca cgcatgagta caaggtcac aaaggcagca 1080
tctaataata aagctactaa atccattaat aaaaatacgg tgactgtgag gggatattca 1140
caagaatcta caaaaaaaaaa 1160

```

<210> 654

<211> 836

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (538)

<223> n equals a,t,g, or c

450

<400> 654

```
gaaggcctga gagacggcag actgagcaga attccttttt tgagcacgag agcattacta 60
gaaccattgt caaagcagtg gcaagggacg gagaggtccc aacaggagtc aggaagaggt 120
ttgattataa ccaagaaaac tcactatgct aggaatagac tgtgtgcacc agtcccagac 180
acttggcaga agtgtagcag cgttacacat gtgtgcgaas agatcgagg ttccacgcca 240
tctgcatggc ctgcaggagc ttctgctgct gaccccatgc tgagtggcca gtggggagcg 300
gcgcccggca ggctcttctg gggctcgtctg tcctatccgt ggattgtata tactcttctc 360
tgttaaggag tttttcccaa gaagaaaagt atttaaaaga aataccagtg agtgccttaa 420
agttggagaa gtaactgccc atgcccagaa ataaggatgc cagtgccag aagcagtgag 480
attagtctgt gtccacaagc agaggcccc tcgatgggag ggagtggcag gcaggagnaa 540
ggtggcgctg ccaggtgccc gggctctattg gaggcgcccc atctcagact tcctaacaca 600
gcctgtgtgg aaggcagaac aaagaatgca tgcccagtc gaaatctgkt ctattctgct 660
ccaggaat cggaaacctg tgagtcagag tcagagaaac ttaccaagc aacgtaattc 720
ctgttttcat gggctctgta gatgtttgag tcaggaggta aggcggggag ttactaataa 780
actctgcctt ttaaattgag catcttggcc gggcatggtg gctcacgcct gtaccc 836
```

<210> 655

<211> 1188

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1158)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1162)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1175)

<223> n equals a,t,g, or c

<400> 655

```
actatatctg gcctttataa acttttttga ttcttgtcat aacacttagc ctaaaatgca 60
aatgtacagc tgtagaaaaa tactttatct ctttatatcc ttattctaga agcttttttt 120
ctattaattt ttgtttgttt gktttgtttt actatttact tctaaaactt ttttgttaaa 180
aaccatggca caaacacaca cattatgcta ggcatacaaa aggtcaggat catcagtctc 240
actgtcttcc accccactt ctcacccac cattgtatct gctgtctgtg gctgaccaa 300
acatcatcat gtagcacatg actagtgtgg caagtgtctt gttagatgta aggccatgat 360
gctaaagcat cacaagaggg catctaacc agattgggga tgtcatggaa ggccgacatc 420
ctgagttgaa tcctgcaaat gtaaaaacca ataggcaaag aagaggaaca aaaaggattc 480
caggacaaac tgaggtcaca tctatgatcc ttgactttat tgtgtctgtt taaagtatct 540
acagtaacct gtatcaactt agtcagtgtt ttaatactaa atttagctcc ttcaaagcag 600
ttggaactat gtgctacata aatttcagct tcacacaagg aagggaagga gtgaaattag 660
tgaacaggca gttacagcaa aagaaaaaac ataaaaattg aatagctggc tctggtgaaa 720
tgagcaagga ctttagagtc aaactggcct ggatttgaat cctgatctc attgcttgta 780
```

451

```

gctgtatgat ctggacaaat gacagtaact gtttctaacc ttgattttct catctgtaag 840
atgccaatg taactcctaa ggatactgag gattttttaa aatgcgtgta cagttcctga 900
ccagtgggtt gtgcctaata acttattaca aattattacc cagtaaaaac cttgagacaa 960
gagtgaaaac gtaaagctaa ttaatccatt acttgtagc aagcaaacta cgtgcttgag 1020
aaaattactc aactttcatg ttttacttcc agacagtagt ttgattaaaa gaaaaaaaaa 1080
aaatccagcc caagcatggt ggcttacacc ctggcacttg gaaggcccaa ggtgggaacc 1140
ataagcttgg agccctanca anttttgaaa actanccctg ggggcaac 1188

```

<210> 656

<211> 1132

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (256)

<223> n equals a,t,g, or c

<400> 656

```

gacgcgtccg ccgcctccgg aactaaacgg ggtgagggtca cattcgggtta tctctaacgt 60
tggaacacga tggagctaac acccattatg gagattaacc acttttcatc aggtttttaa 120
cttaagtcgt gaggaatata acggtgaaca caagattcat tttattttca tcaccatggg 180
acgtatcctg ttgttgagtt ctctgggtca gacctctgaa gacttctcag atggatoccta 240
gtctctgggc ttgccntgaa attactcgtc gctcaggag agagttgaaa tggttggcat 300
cctcccactc tgttgctccg gctgtgtccc ctgcctctgt tgttccagct atgtcccctc 360
tgttgctcca actgcagctc attctgttag agttcctcat tcagctgggc actgtggcca 420
gagggtgttg gcctgctccc ttcctcaagt attcttaaag ccatggattt ttgtggagca 480
ttttctctcc tggctctccc ttgagttatt ttcctttctt cgctatcttg ggactcttct 540
ttgtgcttgc ggwcacgggt tgagagaagg acttcttctt ccttgtctcc ttggtgttgg 600
ctcgtgggtg ctcttcaaca actggactgg aggcctcttg ttttctctc atcttcaaca 660
agtcagtctc tctcaagggt ctcacgttgc agcattctta ccagaggcca ttgggccttg 720
agttccagtt ccagtgtctg gagagtcac ctcagctcag caatctcatg ccggttggca 780
attgtcagca gaagccgatg cctgcccac agttctttac tctgaggtgt tagagtggaa 840
taaaaatata aataacttata ctagttttca tgacttctgc ttaatattgg gtattttttt 900
gttttgtttt gttttggcgg tgataggctt accttacatt aaaccaggcc ttagcctttc 960
tgtggctttg ttatgcaaag cctcatatta ctctctagtc tggttcagca ggacagtcag 1020
gtccacacct ggggtgtttt gttttctacg tttacctcaa cataaggtag cttatcattg 1080
tcagccttca tctcctgac caaaataaaa taaaatgccca caggttactt ga 1132

```

<210> 657

<211> 566

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (283)

<223> n equals a,t,g, or c

<220>

<221> misc feature

452

<222> (461)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (483)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (495)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (519)

<223> n equals a,t,g, or c

<400> 657

```

aaaaaaaaa caaaaaaaaaa aaaactactt ctaattagct caatattaat attttaacaa 60
gttgggttgg taacagtata tctttgssca tgctggcaaa ttcttgtttt gtcagcattt 120
tccataactc tggccaaagt gtcacctgat gtggcaacgt ttacagtct tgctattgtt 180
tcttgagtcc tttaatctat aagatgtatt tttaaaaata tataacatat aaattttgtt 240
tcgttatagc tctttaaaaa aaaaaaaaaa aagggcgggc cgntctagag gatccaagct 300
tacgtacgcg tgcattgcgac gtcattagctc ttctatagtg tcacctaaat tcaattcact 360
ggcgcgcgtt ttacaaccgt cgtgactggg aaaccctgg cgttacccaa cttaatcgcc 420
ttgcagcaca tccccctttc gcagctggcg taatagcgaa naagcccgca ccgatcgccc 480
ttnccaacag ttgcnacgac tgattgggga atggggacnc gccctgtatc ggcgcattaa 540
gcgcggcggg ttgcggtggt ttcgcc                                     566

```

<210> 658

<211> 1178

<212> DNA

<213> Homo sapiens

<400> 658

```

atccagcggg tgagtctggt gaggagtctt tgcgagagcg aggagcagcg gttactggaa 60
cagggtgcatg gcraagagga gcgggcccac cagagcatcc tgacacagcg ggtgcaactg 120
gccgaggcgc tgcagaarct tgacaccatc cgcactggcc tgggtgggcat gcttactcac 180
ctggatgacc tccagctgat tcagaaggag caagagattt tgcgagaggac cgaagaagca 240
gagggcattt tggatcccca ggagtcggaa atgttaaact ttaatgagaa gtgcaactcg 300
agcccactac tgacccaact ctgggcaacg gcggttcttg ggtctctctc aggcacagag 360
gacatacggg tcgatgagag gacagtcagc cccttctctc aattgtcaga tgatcgaaag 420
accctgacct tcagcaccaa gaagtcaaag gcctgtgcag atggcccggg gcgcttcgac 480
cactggccca atgccttggc tgccacctcc ttccagaatg ggctccatgc ctggatggtg 540
aatgtccaga acagttgtgc ctataagggt ggcgtggctt caggccacct gccccgcaag 600
gkttctggca gtgactgccc tctgggccac aatgccttct cctgggtctt ctctcgctat 660
gatcaggagt ttcgtttctc acacaatggg cagcaagagc ccctggggct gctgcggggc 720
ccarcccarc tgggtgtagt gctggacttg caggttcagg agctgctctt ctatgagcca 780
gcstccggca cagtgtcttg tgcccatcat gtgtccttcc cggggccctt cttcccagtc 840
tttgctgtgg ccgatcagac catttctatc gtccgctgac ctctggccac aggaagccag 900

```


453

```

gtccaccgcc caccaccctt tcaggccatg tttctactca gtgtgctttt cccaaatgat 960
gtgtgtggtg tttctaagag aaacagggcc cataaccagt gggcagcttt aggagggatg 1020
gggatctgtt tcagatctag gcataacctg taaatcacag gtgtccaaac ttttggcttc 1080
cctgggccac atttgaagaa gaattttctt gggccacata aaatacacta acgatagctg 1140
atgagctaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaa 1178

```

<210> 659

<211> 924

<212> DNA

<213> Homo sapiens

<400> 659

```

gctatagtct gtkaaatgtg cagtagcggt gtgtcttaaa aaatgtgcat actttaaaaa 60
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tgctggtgga gggtcctgcc tctatcttga tggctgctga ctgagcagag tgggtggtgc 180
tgaaggtycg ggtakctgta gcaatttctt aaaataagac agtaataaag ttgccacatc 240
aatgggactc ttcctttcac aaaagatttt tctggaagca tgggatgctg tttgataagc 300
atthttacca cagtagaact tctttcaaaa ttggagtcag tctcttcaca ccttgccact 360
gttgtactat gtttatcaat attctaaatc ctttgttgta ggctaaacaa tattcacagc 420
atthttacca ggagtaaatt tcatctcaca aaaccacttt ccaggctctt tctggactgt 480
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ccaaccttga tccccgagtc ttcacaaatg ctactgaag aaaattccta gaacaattca 660
gggtccttht ataacctcta ctctgaggyg ttaataaaaa accttagtaa cttaaaaaaa 720
atgagctgta cacaaatact gaacaataat gctacatatg ttaagtatgt aagaaaaata 780
tatactthtga cataaataag aaacggtgag ttgataattg gatagaatgg tggatagagt 840
gakagatatg tagtaaagca aatataacaa aatgataatt gtacaatcta agtggttgga 900
ctataaatat gcacttccca caac 924

```

<210> 660

<211> 813

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (791)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (798)

<223> n equals a,t,g, or c

<400> 660

```

aggcgagtag catgtgcggg agactcacgt tgccggcgaa gtgggagaga gaaaagtggg 60
gggtgaacaca ctgtggggta gcttcgagat cagcaatgtg agactagccc gggatcatgct 120
gacacagtht gccgaggggc ggctggaaga tcaactggac aaatatgatc actgggctga 180
ccgctthttag gacctgcccc tctatttcat gactthtccat ggacagcaaa gcatcaggac 240
tgtaatatgat acaatgcaac atgcagtcta cgtctatgac atthtgcattg tgatcatcga 300
caacctgcag ttcattgatgg gtcacgagca gctgtccaca gacaggatcg cagctcaaga 360

```

454

```

ctacatcattc ggggtctttc ggaagtttgc aacagacaat aactgccatg tgacactggt 420
cattcaccccc cggaaagagg atgatgacaa ggaactgcag acagcgtcca tttttggctc 480
agccaaagca agccaggaag cagacaatgt tctgatcctg caggacagga agctggtaac 540
cgggccaggg aaacgggtatc tgcagggtgc caagaaccgc tttgatggag atgtagggtg 600
cttcccgcctt gagttcaaca agaactccct caccttctcc attccaccaaa agaacaaggc 660
ccggctyaag aagatcaagg atgacactgg accagtggcc aaaaagccct ytttgggcaa 720
aaagggggct acgacacaga actytgagat tkgytcaggc caggccccma ctccccgacca 780
gcagacacct ncaagcgntc aaagtgaagg ccg 813

```

<210> 661

<211> 1718

<212> DNA

<213> Homo sapiens

<400> 661

```

ggccgggcat cgcaggcgcc ctctcggggc ctcccggccg ggggcgccaa cggggagagc 60
ccggggggcg gcgccccctt tccgggcagc agcggtctct cgcacctgct gcaggcggag 120
gtgctggatc tggacgagga cgaggacgac ctggagggtg tcagcaagga tgcctcattg 180
atggacatga actccttcag ccctatgatg ccaacatccc ctttatcaat gataaaccaa 240
atcaagtttg aggatgaacc agatttaaag gatctcttca tcacagttga tgaacctgaa 300
agtcattgta ctacaataga aactttcatt acgtatagga ttattactaa gacatctcgt 360
ggggaatttg actccagtga atttgaagtt aggagacgat atcaagattt cctttggttg 420
aagggaagac tggagaagc acacccact ctgattatc caccattgcc agaaaagttt 480
atagtaaaag gaatggtgga acgctttaac gatgacttca ttgagacacg caggaaggct 540
ttacataaat ttttgaaccg aattgctgat catccaactt taacatttaa tgaagacttc 600
aaaatttttc tcaactgcaca agcttgggaa ctctcttctc acaagaagca aggtcctggc 660
ttgctaagca ggatggggca aaccgtcaga gctgttgctg cctcaatgag aggagttaa 720
aaccgcccag aggagtcat ggaaatgaat aactttattg aactatttag ccagaaaata 780
aatttgatag ataaaatatc tcagagaatt tataagggaag aaaggggaata ttttgatgaa 840
atgaaagaat atggcccaat tcatattctg tggtcagcgt cagaagagga tctggttgat 900
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gttttgacct atwaaaaggc agatactgat ctgcttcag aggagattgg aaaacttgaa 1140
gataaagtgg aatgtgctaa taatgccctg aaagcagatt gggagagatg gaaacaaaat 1200
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gcatttatta accaaagtta ttctttctgg atctgccgtg tctttataaa gtggatgaaa 1440
aatgttttgt acccatctgg aaaaccaaca acttgaaatc tcaggatatt caggtcactg 1500
acatgaattt gaagatatat ctatctgtat ggatatatat ctatatgtat atagatatat 1560
aaatacagag agatatctgg cttgggtttta attatgttct taaatttgtg tgccaataat 1620
tgcatataga ttttttttct taaatatatt actgtggaac atgccatttt aaatatgttg 1680
taaggactgt ttttaataaaa agtttagtat gaaaaaaa 1718

```

<210> 662

<211> 1114

<212> DNA

<213> Homo sapiens

<400> 662

455

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gcggcggcgg cgcaggggct ggtacgcgct gggcggcgag agctcatggc ggaggaagag 60
agcgaccaag aggccgaacg cctcggagaa gagcttggtg ccattgtgga gtccccgctg 120
ggccctgtgg ggcttagagc tgcgggcgac ggcagaggcg gcgctggcag cggcaactgc 180
ggcggcggcg tcggaatcag cagtcgggat tactgccgac gcttctgtca ggtggttgaa 240
gattatgctg gaagatggca ggtccctttg ccacagcttc aggttcttca gactgccctt 300
tgttggttta caacagccag tgcattcatt ccagatgaat gtgagcatgt acaatatgtt 360
ttgartagcc ttgctgtgag tttctttgag ttgctgctgt tctttggaag agatgagttt 420
tatgaagagc ccttaaagga tattcttgga tcattccagg aatgccagaa tcacctccgc 480
agatatggaa atgtgaatct ggaactggtg actcgaatca ttagagatgg tggcccatgg 540
gaagatccag tgttgcaagc tgcctttaa gtcagccag catctcagga gatagtgaac 600
aaatatttaa gttctgaaaa tccactgttc tttgaactac gtgccagata cctaatkgtc 660
tgtgaacgca taccggaagc aatggctctt attaaatctk gtataaatca cccagaaatc 720
agtaaagact tatacttcca tcaagcactc ttcacatgtc tgtttatgtc acctgtagaa 780
gatcagctat tccgggaggt attgtttgag actatttttg cctattacca ttttaaccct 840
accaaaaaaa aacaaaaaaa aaaaagtagc ccactgttgt tgttaaattc cttttacagt 900
aatgccaaag atttaaggat tacattatct ggatgtgttt tcttttgga ccataactta 960
aggtcatgtt gaattagtca aaatctgata ttaacaaatg atgaaatcaa taaaatatac 1020
tcattaataa gtattattca cattgcactt ttgatgtgat ggagaagagg tcaaataaaa 1080
gtcaacaagc tcacagcttg ccaggagtaa aaaa 1114

```

<210> 663

<211> 341

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (25)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (50)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (70)

<223> n equals a,t,g, or c

<400> 663

```

gattaaaagg atggctcttc ctaangtaat ttactctttg ttggttttan gaaatctttt 60
gcatgtatan ggtataaaac aacaactgtt tatatgttac ttccattagc cgatgaacta 120
gyggktaaat gatgcttcaa atagaaaata agttaattcc actaatagat tgtgttttca 180
ttaaagtcatt aaacatgaaa taacacttta caaagttcat tttgttgagt atcttgcat 240
actgtgaatt atattgtaaa gtagtttaaa gtttaacatt aaagataaaa ttattatttt 300
tgctgttatg gtatgaataa aaaaatttga ttaactttta a 341

```

<210> 664

<211> 285

<212> DNA

456

<213> Homo sapiens

<400> 664

```

accatggcag tacacaggcc gccgccaatc tgcttaacac caaccagctt gacgcgcgca 60
gctttcacca tcgcgtcaga agcctcaatc agtgcaacca ggccccgggt ttcgatcatt 120
cctaagtctt ccattgtsct ttctcttcta tcagggtcca gaacgggacc gttcattcaa 180
ccagtgtttg taaactgctt tcgcggttca ctwctgtctg acgcggcaca gctgccacca 240
gcgccagctc gataatttcc tgcacgctac aaccacgaga gagat 285

```

<210> 665

<211> 631

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (581)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (589)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (608)

<223> n equals a,t,g, or c

<400> 665

```

atgaaaaata acagattata tatagtttga actatttttc gtgtgctttt ttaaacttgt 60
taaaaagaaa tttatataaa atttaaaata caaatgttaa attatccaga aatacagaat 120
agttaatatt gctagaacca aataacctct aaaatgtttt tattttggta attttgtcat 180
gctaagcact tttgtatctg cacaattcag taggttaaga atcaatcttc tttttcttaa 240
tagtacagca gacttttagct tcaagtttca taggcttagt acttatatct agacatttgt 300
gtctaaataa gctttttcatt aactttttat ttttaaggaca gtatcttttc atgaaagagt 360
at ttggctga atgttttgcta tatatatgtt acttgaaatg ttaaatttaa tatgcagcat 420
accataggtg tatatatagg tatataattt taagggttaa atattcagtc tacaagtttg 480
gttccttatt taagcttttg ggctaatact gcatatggca caatgtttta atattggcaa 540
kttcatctca raraagggga tcaratataw ttttaaagtt naaaaaaant tactgaaacc 600
tccccctnaa aagcctacct ttatttaaac c 631

```

<210> 666

<211> 1529

<212> DNA

<213> Homo sapiens

<400> 666

```

aaaatttgct gtaataccaa aactaacctc atcaaagata cagaaaaaaa gaaatatagt 60
gagccctaaa ggacacatac attgaataaa taattggaac atgtgggttat cttagatcc 120
acatcttagc tgtcatttgt tcactctaaa actgatgttc atctttctgt taatttcct 180

```

457

```

ctgcctaaag actacatgac agaaatgacc taccactact tattatttct gaagcctaac 240
tgcaagactg atttctgaga acaagtaaag aactggaata cttatttttc atataaaaaat 300
ctaaatgtgt taataaatca ttccatacaa aggtacatta ttaaataacc acattatttaa 360
aataattgca agaaaatgga ccatattttac aatgttttgt aaacttgcta gtgtgtggat 420
atgtacccta cttgtgaaat acatttgaag atataaagag cagccaaaat gatggcaaaa 480
tggtaggcta atattttcta ttattattgg agaacatata atattttgga atcatgcaat 540
tttgcacaca gtgaaacat taattttcca aggtaatcc tttagaatat ggtattggca 600
tgcagtttct tacttatcta gaatatttgg cttatctgaa agatatcaat ttaagatctc 660
tggaagtgtt agaatttttg atccttcaca gtgtcaatat ttaatgaatc actaagcttt 720
atattattaga cgtgttgagt gagtgcctgag ttccttgctg ccacttttgt taccattgtc 780
acacactatg tgtaaacag tcccaccact tattactaat aaaattttga ctgataattt 840
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cattttaaat tacgratact ggacttattg gatttaatta taaatccaat tactactgga 1140
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aaattcgtaa gtgtaagaaa gaatgtgaga atataattaaa tgcacactgt accattagat 1320
gaaatcttac ttgagaaatt gccataagcc atattacaga tcttactttg ttactgaatc 1380
agattaattt cttgttataa taattttcat cataaatttt ctatttttaa agccgctggg 1440
actagaaata ttcttttaat gctatatcta tgtacctact gacacatttt tctccataaa 1500
agtactttta aaaattactt catgatttg 1529

```

<210> 667

<211> 1020

<212> DNA

<213> Homo sapiens

<400> 667

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tcgacccacg cgtccttaag tttttcaagt tacccttttc tgaggaaaat tattctagag 60
gaacctaaaa agggacaaaa aaattgaaac ttcttaggag tctaactctg gtgccttctg 120
ttaaaagtca gtgtatcaga aaagaaagca gccatgtaag aggctaactt aartagaagt 180
gctagaaata tctttgtgta ttaacatgca ataaaaggta ccattcaaaag caggggggaaa 240
ggtaggaaga agaggtaatt ttactgaaa attagggcaa tgttggtcgc cttttattaa 300
aagctttttt taagctttca taaagattgc tttttgctat ttttgaaaat atgggtattat 360
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taatctggtg tgtttacata ggatatacat agttgaaatc tagcatgaaa gggtaaaaaag 480
gagatactgc acaatatttc ttaaaaagtaa aatgctgtta ttgtgatgag tctttgggtt 540
aacatcacag tattctgtga tgtcctttta actttttgga aagaggatc atttgtagaa 600
aaaatttgat ttgggttaaa tataggtttt taaaactata aatggtgtct tttttatatt 660
tttatgaaaa agcagtagaa aattactttt gaagaaaaca ggctatttaa atattgaaat 720
atatgtatgt tgtgagttta aggagcctgt aattgtcagt ttacaaaac catctgtgtt 780
caatggttgt aaataaatc tcaaaacatc atttcaaagg ctgcctacag aatattatca 840
cttgacagat agagttaata aattaccaat caggcacatt ttataatgtt tgtctctgta 900
aaggtaatat tagcagttaa agaacacgga tgagaaaaga atgtgttaca taggttgcag 960
cacttgcagt taaataaaaac tcacaatttg tgctcacagc aaaaaaaaaa aaaaaaaaaa 1020

```

<210> 668

<211> 810

<212> DNA

458

<213> Homo sapiens

<220>

<221> misc feature

<222> (9)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (793)

<223> n equals a,t,g, or c

<400> 668

```

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gttttccttt tttcctttta attggatgca ctgacctggc ccaggaaatg aagagattct 120
cttttgatgc tattaccaat gttatcataa agtgacagtc acctgtaaca aaaagggtggc 180
accagacatg atcactgatg ttttatttgc acatcaatat ttttattttt gtattctggc 240
tcagctgctt ctctgagtgg agttaaggaa tgagccacaa agatttttgt agtaggtata 300
ttggcattgc attttatatt cctctatatt taattttgaa aacctaaaag aaggattgtg 360
catcttgaga gaaagttgag caaattgtga tctagcggaa tgtaatttg tgctgcttct 420
tgtgcacgat agcagcagta gtatctctct tggaaataaa catcccatat tatgatgtct 480
atgaatatag gtttcctttt cttccttccc tccctccttc cccacacctt ctcttttttt 540
tttctctctc agcttctctt ttctccttc cctcttccct tcctctttct ttactttttt 600
tgaaatcact tattgtaa atgttgtaaat ccaaacctca tgtatcaatg gggaattttc 660
aaatataaat attaccaatg cattttctgg ktgggtggctg atttttgatt gaagataatg 720
agaatgacat gtctggtgct ttkgggtgag gactcgctta gctcataaac tttkggattt 780
tagaattcaw tgnntaaccg gaaaaaggcc 810

```

<210> 669

<211> 2501

<212> DNA

<213> Homo sapiens

<400> 669

```

taaatatgca tatagtagag tgcaaaaata tagcaaaaat aaaaactaaa ggtagaaaag 60
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agagaccagt gcctgggtgg tgccctcctct tgtctgccct catgaagaag cttccctcac 180
gtgatgtagt gccctcgtag gtgtcatgtg gagtagtggg aacaggcagt actgttgaga 240
ggagagcagt gtgagagttt ttctgtagaa gcagaactgt cagcttgtgc cttgaggctt 300
ccagaacgtg tcagatggag aagtccaagt ttccatgctt caggcaactt agctgtgtac 360
agaagcaatc cagtgtggta ataaaaagca aggattgcct gtataattta ttataaaata 420
aaagggttt taacaaccaa caattcccaa cacctcaaaa gcttggttga ttttttggtg 480
tttgaggttt ttatctgaag gttaaagggc aagtgtttgg tatagaagag cagtatgtgt 540
taagaaaaga aaaatattgg ttcgcgtaga gtgcaaatga gaactagaaa gttttatacg 600
attatcattt tgagatgtgt taaagtaggt tttcactgta aaatgtatta gtgtttctgc 660
attgccatag ggctgggtta aaactttctc ttaggtttca ggaagactgt cacatacagt 720
aagctttttt ccttctgact tataatagaa aatgttttga aagtaaaaaa aaaaaaatct 780
aatttgaaa tttgacttgt tagtttctgt gtttgaaatc atggttctag aaatgtagaa 840
attgtgtata tcagatactc atctaggctg tgtgaaccag cccaagatga ccaacatccc 900
cacacctcta catctctgtc cctgtatct cttcctttct accactaaag tgttccttgc 960
taccatcctg gcttgtccac atgggtgctct ccactctct ccacatcatg gaccacaggt 1020

```

459

```
gtgcctgtct aggcctggcc accactccca acttgaccta gccacattca tctagagatg 1080
gttcctgatg ctgggcacag actgtgctca tggcacccat tagaaatgcc tctagcatct 1140
ttgtatgcat cttgattttt aaaccaagtc attgtacaga gcattcagtt ttggctgtgg 1200
taccaagaga aaaactaatc aagaatataa accacattcc aggctgctgt tttctctcca 1260
tctacaggcc acacttttac tgtatttctt catacttgaa attcattctg ctattttcat 1320
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<210> 670

<211> 429

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (369)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (380)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (410)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (415)

<223> n equals a,t,g, or c

460

<400> 670

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taaaagctgg tgagtgggtt atacaccatc acaaaggatg cccattcttc gcagtgactg 180
cagatgcgtg cggacggaga gcacaaggat ctactatca tttctccctg ctaactccta 240
gaaagctttc cactttcttg gacacgttat ttaaagtgtt atagtttggt tttttaaact 300
tgtgttcaga aaacacttac caccatattg cttcactgta ctattccaat tcagctcctc 360
tgttaccna actctatatn gtgcttggtg aactattcca tgaaatttan taccnggaag 420
aaattaggc 429

```

<210> 671

<211> 1482

<212> DNA

<213> Homo sapiens

<400> 671

```

cagggcactg agtgattctg gatgggcttc tgacctgggg acaattttaa cagcattaca 60
accgacattt tgggtttctt ggggatttta taggccaggt acaaagcaga aagtgcata 120
aagatgtgat ccactttgcc tgggaagaga agctctttct cctggctgat gaggtgtacc 180
aggacaacgt gtactctcca gattgcagat tccactcctt caagaagggt ctgtacgaga 240
tggggcccca gtactccagc aacgtggagc tgcctcctt ccactccacc tccaagggct 300
acatgggcga gtgtggttac agaggagggt acatggagggt gatcaacctg caccctgaga 360
tcaagggcca gctggtgaag ctgctgtcgg tgcgcctgtg ccccccagtg tctgggcagg 420
ccgccatgga cattgtcgtg aaccccccg tggcaggaga ggagtccttt gagcaattca 480
gccgagagaa ggagtcggtc ctgggtaatc tggccaaaaa agcaaagctg acggaagacc 540
tgtttaacca agtcccagga attcactgca accccttgca gggggccatg tacgccttcc 600
ctcggatctt cattcctgcc aaagctgtgg aggtctgtca ggcccatcaa atggctccag 660
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gctttgggca gaggggaaggc acttaccact tcaggatgac tatcctccct ccagtggaga 780
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catcaggctt ctcccagtac aggaggggtg catccccag catgcggctt ctctgccatt 1320
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ccctcactgg gagcttcccc atcctccctg ccttccccag tgggaagtta ggggaagctca 1440
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```

<210> 672

<211> 607

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (499)

<223> n equals a,t,g, or c

461

<220>

<221> misc feature

<222> (585)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (596)

<223> n equals a,t,g, or c

<400> 672

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aattcagcac gagatgtcac attgaagaat ttcttcatga tacattttca ggcacacttg 60
taggaaaatt aggatcatga gtcttgcttt aagtatttgc agtgtagtaa gagaatccat 120
cttttactag gagaccagat tctttttata cctcattcat catgctggat tgtaataaat 180
ttcagatttt ggaatgggct tatttaactg acctaacaaat cttgatgatt tccattagaa 240
taacttattc taaggatcaaa agtggaaaga cactgttggt ttttattttg atttcactat 300
actcattttt gaacatggaa atacagtggg gaaaccmctt atgcaaaaat gataacagtg 360
aggaaattat gacagtgaag gagatctgac ctaactatct atcttgcttc gaaactgccc 420
ttggctcggt ctgagtgtgg gccaaagctaa ctttgggaga aatttacttt atagggttaa 480
ttataatagc ccttccccna aactaaacgg attctcctgc ctcagcctcc cgagtagctg 540
tccttataat accatcagcc tatcatttat tcgtcatggg atggnttggt tcccanatcc 600
cctatcc 607

```

<210> 673

<211> 470

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (389)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (469)

<223> n equals a,t,g, or c

<400> 673

```

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tctgaggaca gttgtgattg gatthagggc ccatccagtt agtccaggat gatctcatct 120
caagatccta aatctgatta caattgcaaa gatccttttt ccaaataagg tcacatgcac 180
gtaagtcccg gggattatgc ttgcgtggga cacatctttt ttgaggccac cattcaaccc 240
actacaaaat ccaactgaag cccagcgaag tggctcatgc ctgaaatccc cgcactgtgc 300
gaggccaagg caggagggtc acctgaggcc aggagttcaa gagtagcctg ggcagcgtag 360
ggagrteckc atctcttttt tttttcgana tggagtttcg ttcttggttac tcaggctgga 420
atgcaatggc gcaatcttgg ctactataa ctctctctc ctgggttcna 470

```

<210> 674

<211> 1110

462

<212> DNA

<213> Homo sapiens

<400> 674

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ggcagagctg ttttggagat tgattgggtg ggtctagagc cagaattcat atttttaata 60
tgcattccag gagactcctg cgaatcagat gcatttggaa atcattgcac taagtcatat 120
ctctgggtac tccaaacagc tagtcctgag gcttccttgg gccttagaat tttttcttca 180
aatgtcctgg tgaggtcctt ctcaatcctt tggggctggc tgtggtgagt cactcagaag 240
tctggctgtg acctgggatg ggctcaccag agtacgctat ggtagtggga aaacaggcag 300
agagaaagga gtgtcaggag cactcccagg gaggctgttg tagatatttc cattcccaga 360
acagtgatct attgtgacag tctcagaaca gacaacaaga attacaggta attttctcat 420
tctcttgata tatttttagc aaaacttaaa tcatgaatag aaggaaaaga tgccattggg 480
gaaatagaaa aactcaatca ttttataaag catacaaatc ataaggatga ctggccaata 540
gcactccac tttggcttta cctaaagtgg ggtggacaag aataataaaa gtcctcakt 600
tatatccttc caaaatcaga tttaaatgct gccagcatct taatggaagt ctgaaattga 660
ttgataggat gtagaaatcc aaattcacta aaataggggg ccagctacat aaagtcctag 720
aaggaaaaag tgccctgctt ttttctgcca ttatcctacc ccctagtcat ctggggaatt 780
gatctatgaa gcttgaagaa ggggcattta acatcagagt ggtgcaaggg cagtgttgag 840
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aatatttgtg ttatttttat gatatttac tgtttacaga acactttcat ttgatcccaa 960
catcaactgc tgtgatagag gcagggcaga tgttgtggtc tcattacata gaatgtaaaa 1020
ctgaggttga aaaataactaa gtgacttgtc ttagtcaaaa tggtttttaa aattataaag 1080
ccaggccttc tgactgtcaa aaaaaaaaaa 1110
```

<210> 675

<211> 250

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (245)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (246)

<223> n equals a,t,g, or c

<400> 675

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aaatttacta ctttttaaaa tgacttgaat cttctctatt ttcacagttc ttgtctat 120
tttccttgta acagtttgta tgaacactaa tgtggtgttc aaccctccct ttcaatttta 180
gagaattgga ttctatattg gaacgtcact taaatttttg agtcctcaaa accaaccttg 240
ttggnntggg 250
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<210> 676

<211> 692

<212> DNA

<213> Homo sapiens